THE

AMERICAN PRACTITIONER AND NEWS:

A BI-WEEKLY JOURNAL OF

MEDICINE AND SURGERY.

"Nece Tenui Penna."

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VOLUMES XIII AND XIV—1892.

LOUISVILLE, KY.

JOHN P. MORTON & COMPANY, PUBLISHERS.

1892
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CASSELL, JOHN B., M. D.
CHEATHAM, W., M. D.
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CURRY, GORDON L., M. D.
DABNEY, S. G., M. D.
DRAKE, J. W., M. D.
EVANS, T. C., M. D.
FALCONER, R. CRAIG, A. M., M. D.
FLEXNER, SIMON, M. D.
FRANK, LOUIS, M. D.
GRANT, H. HORACE, M. D.
GREENLEY, T. B., M. D.
GUEST, JAMES W., M. D.
HON, U. H., M. D.
HOWARD, J. L., M. D.
IRWIN, J. W., M. D.
JENKINS, J. O., M. D.
JUDSON, A. B., M. D.
KELCH, ALLEN H., M. D.
KINNAIRD, JAMES B., M. D.
LEWIS, JOHN A., M. D.

McCLURE, W. B., M. D.
McDERMOTT, T. L., M. D.
McKEE, E. S., M. D.
MARSHALL, EWING, M. D.
MATHews, JOSEPH M., M. D.
MEANY, WILLIAM B., M. D.
MILLIKEN, SAMUEL E., M. D.
OUCHTERLONY, JOHN A., A. M., M. D.
PAGE, Prof. R. M. C.
PALMER, E. R., M. D.
PATTON, JOSEPH M., M. D.
PITTMAN, W. H., M. D.
PREWITT, J. V., M. D.
PURDOM, J. F., M. D.
PRICE, A. D., M. D.
RADEMAKER, C. J., M. D.
RAY, J. MORRISON, M. D.
RICHMOND, W. W., M. D.
RILEY, HENRY A., A. B., LL. B.
ROBERTS, W. O., M. D.
SCHROEDER, S. P., M. D.
SCOTT, M. T., A. M., M. D.
SHIRLEY, I. A., M. D.
SIEBEL, W., M. D.
SKINNER, CORNELIUS, M. D.
SLEET, W. E., M. D.
STUCKY, THOMAS HUNT, M. D.
TODD, LYMAN BEECHER, M. D.
TULEY, HENRY E., M. D.
VAaCE, A. MORGAN, M. D.
WILLIAMS, J. W., M. D.
YANDELL, D. W., M. D.
## CONTENTS OF VOLUME XIII.

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abortion, by E. S. McKee, M. D.</td>
<td>298</td>
</tr>
<tr>
<td>Abortion, The Treatment of</td>
<td>138</td>
</tr>
<tr>
<td>Abortions, Repeated, and their Prevention</td>
<td>105</td>
</tr>
<tr>
<td>Acacius Sacchari, The</td>
<td>149</td>
</tr>
<tr>
<td>Acetonuria in the Insane</td>
<td>117</td>
</tr>
<tr>
<td>A. C. E. Mixture, The</td>
<td>119</td>
</tr>
<tr>
<td>Acromegaly</td>
<td>245</td>
</tr>
<tr>
<td>Agnew, D. Hays, M. D.</td>
<td>249</td>
</tr>
<tr>
<td>Albumen in Urine, The Percentage of</td>
<td>87</td>
</tr>
<tr>
<td>Albuminuria and Life Insurance</td>
<td>140</td>
</tr>
<tr>
<td>Albuminuria and Nephritis of Pregnancy, Therapy in</td>
<td>184</td>
</tr>
<tr>
<td>Alcohol, Recent Work with the</td>
<td>181</td>
</tr>
<tr>
<td>Alcoholic Liquors, The Use of, as a Prophylactic against Disease and</td>
<td>289</td>
</tr>
<tr>
<td>Promotor of Good Morals, by T. B. Greenley, M. D.</td>
<td></td>
</tr>
<tr>
<td>Alopecia Areata, The Treatment of</td>
<td>84</td>
</tr>
<tr>
<td>Amebic Dysentery</td>
<td>60</td>
</tr>
<tr>
<td>American Academy of Medicine</td>
<td>251</td>
</tr>
<tr>
<td>American Association of Obstetricians and Gynecologists</td>
<td>64</td>
</tr>
<tr>
<td>American Hog Products in France</td>
<td>95</td>
</tr>
<tr>
<td>American Medical Association, A Lesson for the</td>
<td>123</td>
</tr>
<tr>
<td>American Medical Association, The</td>
<td>409</td>
</tr>
<tr>
<td>Americans in the Riviera</td>
<td>31</td>
</tr>
<tr>
<td>Amputation of the Breast for Malignant Disease, by H. Horace Grant,</td>
<td>388</td>
</tr>
<tr>
<td>M. D.</td>
<td></td>
</tr>
<tr>
<td>Amputation of the Pregnant Uterus at Term with Intra-peritoneal</td>
<td>50</td>
</tr>
<tr>
<td>Treatment of Stump</td>
<td></td>
</tr>
<tr>
<td>Aneurism, Tracheal Tugging as a sign of</td>
<td>214</td>
</tr>
<tr>
<td>Angina Pectoris, Tubercular Pneumonia, by Prof. E. C. M. Page</td>
<td>131</td>
</tr>
<tr>
<td>Angina Pectoris</td>
<td>376</td>
</tr>
<tr>
<td>Anti-Corset Meeting</td>
<td>255</td>
</tr>
<tr>
<td>Antidiaphoretics</td>
<td>56</td>
</tr>
<tr>
<td>Antikamnia</td>
<td>60</td>
</tr>
<tr>
<td>Antikamnia Poisoning Case, The</td>
<td>61</td>
</tr>
<tr>
<td>Antipyrin Habit, The</td>
<td>119</td>
</tr>
<tr>
<td>Antipyrin on Secretions of Milk, Influence of</td>
<td>184</td>
</tr>
<tr>
<td>Antisepsis: Puerperal Mortality in Paris Hospitals</td>
<td>159</td>
</tr>
<tr>
<td>Army and Navy Medical Intelligence, 128,</td>
<td></td>
</tr>
<tr>
<td>192, 224, 256, 384, 416</td>
<td></td>
</tr>
<tr>
<td>Arthritis, Hygiene and Dietetics of the</td>
<td>116</td>
</tr>
<tr>
<td>Artificial Neurasthenia</td>
<td>62</td>
</tr>
<tr>
<td>Assimilation of a Physician</td>
<td>64</td>
</tr>
<tr>
<td>Atropine in Heart Diseases</td>
<td>26</td>
</tr>
<tr>
<td>Bacillus of Typhoid Fever and the Bacillus of Coli Communs</td>
<td>347</td>
</tr>
<tr>
<td>Distinctions between the</td>
<td></td>
</tr>
<tr>
<td>Bacteriology, Clinical, by Louis Frank, M. D.</td>
<td>293</td>
</tr>
<tr>
<td>Bacteriology of Endometritis</td>
<td>345</td>
</tr>
<tr>
<td>Balneology, The Journal of</td>
<td>160</td>
</tr>
<tr>
<td>Barrow David, M. D.</td>
<td>324</td>
</tr>
<tr>
<td>BenzoL</td>
<td>316</td>
</tr>
<tr>
<td>Blood and Urine of the Insane, An Inquiry into</td>
<td>90</td>
</tr>
<tr>
<td>Blood in Disease, Researches in the</td>
<td>242</td>
</tr>
<tr>
<td>Boro-Borax</td>
<td>120</td>
</tr>
<tr>
<td>Bouchet, E</td>
<td>63</td>
</tr>
<tr>
<td>Brain and Nerve Injuries, Electro-Diagnosis in</td>
<td>111</td>
</tr>
<tr>
<td>Bright's Disease, Prodromal and Early Symptoms of</td>
<td>20</td>
</tr>
<tr>
<td>Bromal (or Tribromophenol) as a Local Antiseptic</td>
<td>348</td>
</tr>
<tr>
<td>Bromide of Strontium in the Dyspepsias, The</td>
<td>352</td>
</tr>
<tr>
<td>Bromide of Potash, Death after three Doses of</td>
<td>223</td>
</tr>
<tr>
<td>Bromides and Increased Susceptibility to Infection</td>
<td>90</td>
</tr>
<tr>
<td>Bronchitis, Chronic, by John B. Cassell, M. D.</td>
<td>160</td>
</tr>
<tr>
<td>Brown, H., M. D.</td>
<td>321</td>
</tr>
<tr>
<td>Bryonia Alba as a Remedy</td>
<td>27</td>
</tr>
<tr>
<td>Calomel in Eclampsia</td>
<td>317</td>
</tr>
<tr>
<td>Cancerous Degeneration in Fibroma of the Mammary Gland</td>
<td>24</td>
</tr>
<tr>
<td>Cantharidin, Therapeutic Effects of</td>
<td>21</td>
</tr>
<tr>
<td>Cardiac Mechanism, by Ewing Marshall, M. D.</td>
<td>390</td>
</tr>
<tr>
<td>Carpenter, J. G., M. D.</td>
<td>33</td>
</tr>
<tr>
<td>Cassell, John B., M. D.</td>
<td>100</td>
</tr>
<tr>
<td>Caucasian Station for Phthisis</td>
<td>68</td>
</tr>
<tr>
<td>Cecil, John G., M. D.</td>
<td>259</td>
</tr>
<tr>
<td>Cerebro-Spinal Sclerosis and the Acute Specific Fevers</td>
<td>152</td>
</tr>
<tr>
<td>Cheatham, W., M. D.</td>
<td>3</td>
</tr>
<tr>
<td>&quot;Chemotaxis&quot; vel Chemiotaxis</td>
<td>348</td>
</tr>
<tr>
<td>Children, Common Error and Fallacies in the Treatment of</td>
<td>47</td>
</tr>
<tr>
<td>Children's Free Hospital</td>
<td>255</td>
</tr>
<tr>
<td>Chlorosis, New Views of</td>
<td>59</td>
</tr>
<tr>
<td>Chloriform on Bacteria, The action of</td>
<td>191</td>
</tr>
<tr>
<td>Chloriform Syncope Treated by Massage over the Heart</td>
<td>377</td>
</tr>
<tr>
<td>Chorea, Exakzirin in</td>
<td>817</td>
</tr>
<tr>
<td>Chronic Peritonitis, Laparotomy in</td>
<td>52</td>
</tr>
<tr>
<td>Colds, Gelsemium for</td>
<td>352</td>
</tr>
<tr>
<td>Colds, The Prevention of, and their Sequela by Surgical Methods</td>
<td>45</td>
</tr>
<tr>
<td>Comedones</td>
<td>320</td>
</tr>
<tr>
<td>Common Warts, The Contagiousness of</td>
<td>84</td>
</tr>
<tr>
<td>Compound Committted Fracture of the Frontal Bone, by W. H. Pitman,</td>
<td>361</td>
</tr>
<tr>
<td>M. D.</td>
<td></td>
</tr>
<tr>
<td>Concussion of the Spinal Cord, Two Cases of</td>
<td>406</td>
</tr>
<tr>
<td>Coones, M. F., A. M., M. D.</td>
<td>161</td>
</tr>
<tr>
<td>Ourry, Gordon L., Ph. G.</td>
<td>294</td>
</tr>
<tr>
<td>Cysts, Chronic Acid in the Treatment of</td>
<td>150</td>
</tr>
<tr>
<td>Dalney, S. G., M. D.</td>
<td>553</td>
</tr>
<tr>
<td>Death of Prof. Gerhard</td>
<td>64</td>
</tr>
<tr>
<td>Debility, Anemia, and Rickets, The Treatment of</td>
<td>118</td>
</tr>
<tr>
<td>Development, The Neuroses of</td>
<td></td>
</tr>
<tr>
<td>Diabetes Mellitus, by J. O. Jenkins, M. D.</td>
<td>395</td>
</tr>
<tr>
<td>Diabetes, Neuritis in</td>
<td>846</td>
</tr>
<tr>
<td>Diagnosis and Treatment Wanted</td>
<td>186</td>
</tr>
<tr>
<td>Diarrhea, The Lactic Acid Treatment of</td>
<td>345</td>
</tr>
<tr>
<td>Digestion, Does Ether Assist?</td>
<td>375</td>
</tr>
<tr>
<td>Diphtheria</td>
<td>26</td>
</tr>
<tr>
<td>Diphtheria, by J. W. Williams, M. D.</td>
<td>163</td>
</tr>
<tr>
<td>Diphtheria and Croup</td>
<td>246</td>
</tr>
</tbody>
</table>
CONTENTS

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphtheria and Scarletina, Hypodermic Injections of Corrosive Sublimate in...</td>
<td>184</td>
</tr>
<tr>
<td>Diphtheria, Treatment of...</td>
<td>348</td>
</tr>
<tr>
<td>Diphtheritic Albuminuria and Nephritis</td>
<td>89</td>
</tr>
<tr>
<td>Diseased Cattle, The Flesh of...</td>
<td>413</td>
</tr>
<tr>
<td>Diseases within the Past Half Century, Variations in the Character of, by T. B. Greenley, M. D...</td>
<td>225</td>
</tr>
<tr>
<td>Dissecting Rooms for &quot;The Outside Man.&quot;...</td>
<td>191</td>
</tr>
<tr>
<td>Diuretism...</td>
<td>58</td>
</tr>
<tr>
<td>Doctor's Fee when called to see the Dead...</td>
<td>91</td>
</tr>
<tr>
<td>Drinking-Water, Our, by C. J. Rademaker, M. D.</td>
<td>39</td>
</tr>
<tr>
<td>Drunkenness, Cures for...</td>
<td>88</td>
</tr>
<tr>
<td>Dust and Dusting...</td>
<td>125</td>
</tr>
<tr>
<td>Earl of Lytton, The Death of...</td>
<td>31</td>
</tr>
<tr>
<td>Ectopic Pregnancy, Five Cases of...</td>
<td>58</td>
</tr>
<tr>
<td>Eczema, The Treatment of...</td>
<td>376</td>
</tr>
<tr>
<td>Eczema and Psoriasis</td>
<td>120</td>
</tr>
<tr>
<td>Eczema of the Lips</td>
<td>51</td>
</tr>
<tr>
<td>Epidemic Influenza, Clinical Observations, by John A. Oucherlony, A. M., M. D...</td>
<td>385</td>
</tr>
<tr>
<td>Epilepsy, Unusual Phenomena</td>
<td>216</td>
</tr>
<tr>
<td>Equilibrium, The Sense of</td>
<td>255</td>
</tr>
<tr>
<td>Ergot as a Hemostatic in Urine Hemorrhage, The Action of...</td>
<td>79</td>
</tr>
<tr>
<td>Essential Paroxysmal Tachycardia, Treatment of...</td>
<td>88</td>
</tr>
<tr>
<td>Ether Spray and Cocaine</td>
<td>90</td>
</tr>
<tr>
<td>Euphorin: A Substitute for Iodoform</td>
<td>376</td>
</tr>
<tr>
<td>Exajluge, Notes on the Employment of...</td>
<td>351</td>
</tr>
<tr>
<td>Examination of the Human Milk, A few Observations in regard to the...</td>
<td>247</td>
</tr>
<tr>
<td>Exophthalmic Goitre, Pneumonia in the Urine of Patients Suffering from...</td>
<td>316</td>
</tr>
<tr>
<td>Exudation of a Four Months' Placenta one Year after the Delivery of the Fetus, by J. L. Howard, M. D...</td>
<td>229</td>
</tr>
<tr>
<td>Extracts of Animal Tissues, The Therapeutic use of...</td>
<td>45</td>
</tr>
<tr>
<td>Eyes of the Insane, Examination of the...</td>
<td>95</td>
</tr>
<tr>
<td>Face Presentations, by A. D. Price, M. D...</td>
<td>67</td>
</tr>
<tr>
<td>Facial Neuralgia and Ear Troubles</td>
<td>117</td>
</tr>
<tr>
<td>Facial Paralysis due to Rupture of the Ear Drum...</td>
<td>118</td>
</tr>
<tr>
<td>Famine Districts of Russia, The Bread of the...</td>
<td>190</td>
</tr>
<tr>
<td>Famine in Russia, The</td>
<td>121</td>
</tr>
<tr>
<td>Female Sexual Functions, Influence of Obesity on the...</td>
<td>184</td>
</tr>
<tr>
<td>Fetid Breath, For...</td>
<td>248</td>
</tr>
<tr>
<td>Fetid Perspiring Feet</td>
<td>119</td>
</tr>
<tr>
<td>Filariasis</td>
<td>346</td>
</tr>
<tr>
<td>Find the Cause and Treat it, by U. H. Hon, M. D.</td>
<td>9</td>
</tr>
<tr>
<td>Fluid with Meals, On Taking...</td>
<td>183</td>
</tr>
<tr>
<td>Flying Membrane in Man, The So-called...</td>
<td>251</td>
</tr>
<tr>
<td>Foot-and-Mouth Disease, The</td>
<td>215</td>
</tr>
<tr>
<td>Frenckel's Pneumococci in Suppurations Processes</td>
<td>89</td>
</tr>
<tr>
<td>France, The Population of...</td>
<td>95</td>
</tr>
<tr>
<td>Frank, Louis, M. D.</td>
<td>383</td>
</tr>
<tr>
<td>French Laws Regarding Professional Scenery</td>
<td>32</td>
</tr>
<tr>
<td>Galvan-Cautery Loop, Mr. Hutchinson on the</td>
<td>348</td>
</tr>
<tr>
<td>Germ Maniae, A</td>
<td>256</td>
</tr>
<tr>
<td>German Anatomical Society, The</td>
<td>160</td>
</tr>
<tr>
<td>Genito-Urinary Diseases of the Year, A report, by E. R. Palmer, M. D...</td>
<td>332</td>
</tr>
<tr>
<td>Glanders in Great Britain, The Prevalence of...</td>
<td>252</td>
</tr>
<tr>
<td>Glass-Blowers, The Checks in...</td>
<td>287</td>
</tr>
<tr>
<td>Glycerin in Suppositories, etc., Distant Action</td>
<td>346</td>
</tr>
<tr>
<td>Goitre, Its Pathology, Diagnosis and Treatment</td>
<td>76</td>
</tr>
<tr>
<td>Goitre, Osmic Acid in...</td>
<td>90</td>
</tr>
<tr>
<td>Gold in More than a Therapeutic Sense</td>
<td>318</td>
</tr>
<tr>
<td>Gonorrhea, Nervous Complications of</td>
<td>114</td>
</tr>
<tr>
<td>Gonorrhea, Uncured, by E. R. Palmer, M. D.</td>
<td>129</td>
</tr>
<tr>
<td>Good Old Remedy, The</td>
<td>32</td>
</tr>
<tr>
<td>Grant, H. Horace, M. D.</td>
<td>398</td>
</tr>
<tr>
<td>Greenley, T. B., M. D.</td>
<td>225</td>
</tr>
<tr>
<td>Gynecology and Obstetrics, International Periodical Congress of</td>
<td>186</td>
</tr>
<tr>
<td>Gynecology, Progress in, A report, by David Barrow, M. D.</td>
<td>324</td>
</tr>
<tr>
<td>Hands, Antiseptics for the...</td>
<td>158</td>
</tr>
<tr>
<td>Harris Case, Prof. Wood's Testimony in the...</td>
<td>188</td>
</tr>
<tr>
<td>Health of Veterans, The, or Twenty-five Years after the Year</td>
<td>125</td>
</tr>
<tr>
<td>Heart Tonic...</td>
<td>247</td>
</tr>
<tr>
<td>Heart in Typhoid Fever, The Condition of...</td>
<td>77</td>
</tr>
<tr>
<td>Hemorrhage into the Spinal Cord...</td>
<td>59</td>
</tr>
<tr>
<td>Hewitt, Robert Carson</td>
<td>27</td>
</tr>
<tr>
<td>Hon, U. H., M. D.</td>
<td>9</td>
</tr>
<tr>
<td>Hospitals, Bedside Instruction in...</td>
<td>881</td>
</tr>
<tr>
<td>Howard, J. L., M. D.</td>
<td>229</td>
</tr>
<tr>
<td>Hour-Glass Contraction of the Stomach with Large Ulcer...</td>
<td>26</td>
</tr>
<tr>
<td>Hydriatic Canadensis in Obstetrics, The Use of...</td>
<td>147</td>
</tr>
<tr>
<td>Hydrocephalus, A Case of, by Henry E. Tuley, M. D.</td>
<td>7</td>
</tr>
<tr>
<td>Hydrochloric Acid in Diphtheria</td>
<td>86</td>
</tr>
<tr>
<td>Hydrocyanic Acid, Antidote for...</td>
<td>96</td>
</tr>
<tr>
<td>Hyoscyamine in Lettuce...</td>
<td>118</td>
</tr>
<tr>
<td>Hyperemesis Gravidarum, Etiology of...</td>
<td>183</td>
</tr>
<tr>
<td>Hypermetropia, Ophthalmoscopic Appearances in, and their Significance</td>
<td>110</td>
</tr>
<tr>
<td>Hypnotic Sleep, Parturition in...</td>
<td>156</td>
</tr>
<tr>
<td>Hypnotics, Relative Value of...</td>
<td>119</td>
</tr>
<tr>
<td>Hypnotism in Belgium...</td>
<td>123</td>
</tr>
<tr>
<td>Hysteria in Infants and Children under Two Years</td>
<td>86</td>
</tr>
<tr>
<td>Ichthyol in Female Diseases, Observations in Reference to the Use of...</td>
<td>216</td>
</tr>
<tr>
<td>Inebriety...</td>
<td>215</td>
</tr>
<tr>
<td>Infanticide, Unlimited</td>
<td>415</td>
</tr>
<tr>
<td>Infantile Practice, Diuretin (Knoll) in...</td>
<td>183</td>
</tr>
<tr>
<td>Infantile Scabby</td>
<td>87</td>
</tr>
<tr>
<td>Influenza...</td>
<td>50</td>
</tr>
<tr>
<td>Influenza a Hundred and Sixty Years Ago...</td>
<td>126</td>
</tr>
<tr>
<td>Influenza, The Bacillus of...</td>
<td>191</td>
</tr>
<tr>
<td>Influenza, The Neurotic Character of...</td>
<td>51</td>
</tr>
<tr>
<td>Influenza and its Treatment...</td>
<td>243</td>
</tr>
<tr>
<td>Influenza, Nervous Sequelans of...</td>
<td>283</td>
</tr>
<tr>
<td>Influenza, Throat and Aural Disease Following...</td>
<td>319</td>
</tr>
<tr>
<td>Injections of Ammonia Citrate of Iron in Chlorosis</td>
<td>24</td>
</tr>
<tr>
<td>Insanity, A Plea of...</td>
<td>288</td>
</tr>
<tr>
<td>Interesting Eye Cases, Selection of, by J. G. Carpenter, M. D...</td>
<td>33</td>
</tr>
<tr>
<td>International Medical Congress, The Next...</td>
<td>63</td>
</tr>
<tr>
<td>Intra-Uterine Stem Pessaries, A New Method for the Retention of...</td>
<td>214</td>
</tr>
<tr>
<td>Intubation in 1890-91...</td>
<td>81</td>
</tr>
<tr>
<td>Intubation of the Larynx in Laryngeal Diphtheria, with Notes of Five Cases...</td>
<td>81</td>
</tr>
</tbody>
</table>
Prescribing by Telegram .................................. 252
Price, A. D., M. D. ........................................ 69
Professional Standard, A Higher ............................ 188
Proprietary Remedies ........................................ 192
Prostitution, To Reduce the Evils of ......................... 160
Pruritis Hiemalis, Treatment of ............................ 58
Psoriasis and the New Remedy, Gallaceto-phenol .... 408
Puerperal Peritonitis Treated by Amputation of the Uterus, Case of, Recovery ......................... 144
Pulmonary Gangrene, The Treatment of ..................... 246
Rabies in Paris ............................................. 288
Rabies, The Prevention of ................................ 347
Rodemaker, C. J., M. D. .................................. 39
Roy, J. Morrison, M. D. .................................... 257
Rectal Cancer, Medical Treatment of ......................... 284
Rectum, Diseases of the, A Report, by John A. Lewis, M. D. ............................................. 327
Reviews and Bibliography, 20, 133, 174, 210, 237, 279, 312, 366
Rheumatism, A New Remedy for ................................ 59
Rheumatism and Lumbago, For ................................ 216
Richardson, Prof. T. G., M. D., In Memory of .......... 352
Riley, Henry A., A. B., LL. B. .............................. 227
Ross, Prof. James, M. D. .................................. 255
Russian Jews Stopped on the German Frontier ........... 288
Salicylate of Lithia .......................................... 247
Silphene ...................................................... 376
Siler, Dr. Lewis A. .......................................... 223
Seapuln, The Excision of .................................. 57
Schroeder, S. P., M. D. ..................................... 97
Seatica, Suggestions Respecting ................................ 64
Scrofuloderma and Lupus, The Treatment of .............. 87
Sewage, The Purification of ................................ 55
Sex and Music ............................................... 414
Sexual Perversion .......................................... 282
Shall Clergymen Pay the Physician for Services ........ 189
Should Syphilitic Medical Men Continue in Practice ...... 157
Skin Diseases: A New Form of Epidemic ..................... 74
Skinner, Cornelius, M. D. ................................... 199
Smallpox in West Africa, Treatment of ..................... 254
Society, Cincinnati Obstetrical .............................. 313
Society, Clinical, of Louisville, 167, 206, 263, 303
Society, Medical-Chirurgical, of Louisville, 19, 201, 229, 263, 377
Society, Louisville Surgical ................................... 273
Society, Indiana State Medical ................................ 320
Societies, The State .......................................... 382
Some Answers of Student .................................... 64
Sore Nipples, White of Eggs for ............................ 90
Special Notices, 32, 96, 128, 192, 224, 256, 384, 416
Spermatorrhea, Monobromide of Camphor for .......... 247
"Spontaneous Combustion," So-called ......................... 287
Status Epilepticus, The Treatment of ......................... 246
Stomach-Washing in Infants, by Henry E. Tuley, M. D. .......... 260
Restrictions of the Lachrymal Passages, Treatment of, by M. F. Coomes, A. M., M. D. ............ 161
Strontium and its Salts, The Action of ...................... 56
Strachymin on the Stomach, The Action of ................. 284
Sticky, Thomas Hunt, M. D. ................................ 355
Suicide from Rat Poison .................................... 152
Sulfonal, Effects of, etc ................................... 344
Sulphonal .................................................... 247
Sulphonate, Effects of ..................................... 244
Suppurative Ophthalmitis ................................... 147
Surgery ...................................................... 111
Surgery of the Brain ........................................ 69
Sympphyllol Compound ..................................... 120
Teaching Clinical Medicine, Sir Andrew Clark's Method of ............................................ 124
Temperament, The Doctorate Address to the Students of the Graduating Class of the Medical Department of the University of Louisville, Session 1891-92, by D. W. Yandell, M. D. .......... 193
Tetanus Cured with the Tetanus Anti-toxine ......... 190
Thomson's Disease .......................................... 316
Three Fatal Cases, by Ap Morgen Vance, M. D. .......... 1
Tobacco, The Prophylactic Influence of ..................... 245
Tobacco Habit, The ......................................... 351
Tobacco-Smoking among Boys ................................ 414
Tomato the Apple of Longevity, The ......................... 191
Traumatic Paralysis of the Arm ............................ 286
Tremor among Epileptics, Attacks of ......................... 120
Trepbinning for Depressed Fracture and Endocranial Hemorrhage, Report of a Case of, by S. P. Schroeder, M. D. ..................... 97
Trichinosis in Cœlaraese, Mass ................................ 288
True or False Argyria ....................................... 53
Tuberculin ................................................... 54
Tuberculous Lung, Excision of the Apex of, .......... 89
Tuberculin, or Prof. Kleb's Modification of Koch's Tuberculin ........................................ 115
Tuberculosis, Hypodermic Injection of Iodoform in .... 284
Tubercle Bacillus from the Mother to the Fetus, Passage of .......... 345
Tuberculosis in Jersey Cattle, Tuberculin as a Diagnostic Agent ........................................ 350
Tuley, Henry E., M. D. ..................................... 7, 260
Tumor of the Brain .......................................... 81
Two Methods ................................................. 158
Typhoid Fever ................................................. 120
Typhoid Fever, Mercury in ................................ 90
Typhoid Fever, Salol in the Treatment of ................... 370
Typhus Fever ................................................ 251
Typhus Fever, Etiology and Nature of ....................... 213
Typhus Fever in New York .................................. 155
Typhoid Fever Treated by Yeast ............................ 192
University of Louisville ....................................... 217
Uremia, Treatment of ....................................... 89
Urethane, Sulphonal, and Paraldehyde, The Hypnotic Action of ........................................... 49
Urticaria ...................................................... 317
Uterus, The Action of the Constant Current upon the ..... 182
Vance, Ap Morgan, M. D. .................................... 1
Varicella Vaccine, New Researches on ......................... 114
Vice among the Colored, Checking ......................... 133
Vienna Letter ................................................. 136
Von Brucke, Prof., Death of ................................ 159
Washing Out the Stomach in Chlorosis ....................... 284
Weak Labor Pains in Old Primiparae, Etiology and Therapy of ........................................... 376
Williams, J. W., M. D. ....................................... 163
Whooping Cough, The Treatment of ......................... 317
Yandell, D. W., M. D. ....................................... 193
Yellow Fever .................................................. 160
Yellow Fever by Cold, Treatment of ......................... 216
CONTENTS OF VOLUME XIV.

Addison's Disease, The Pathology of. 118
Advertisers in the Journal, The. 31
Aitkin, Charles W., M. D. 225
Albumen and Sugar in the Urine, What is the Quickest and Best Test for? 382
Alcoholism and its Treatment. 210
Alcoholism Increasing among American Women, Is? 446
Alkaloidal Poisons on Lecuocytes, Action of. 344
Alumni Address, by T. C. Evans, M. D. 4
American Electro-Therapeutic Association, The. 183
American Health Resort Association, The. 88
American Orthopedic Association. 352
American Pediatric Association. 96
American Pharmaceutical Association, The Membership of the. 416
American Public Health Association, The Next Annual Meeting of the. 94
Anesthesia by Cocaine. 181
Anesthesia from Ether, On, by James W. Guest, M.D. 129
Anesthesics, The Administration of. 284
Another Medical Prince. 313
Anthrocosis, Small Pleuritic Thickenings. 177
Antitoxines in Tetanus. 380
Are Miracles Unnatural?. 313
Aristol in Gynecology and Abdominal Surgery. 150
Asiatic Cholera, The Vibrio of. 282
Atrophic Rhinitis, The Etiology of, by W. B. McClure, M. D. 195
Auto-Intoxications. 81
Bacillus as a Farmer's Friend, A. 126
Bailey, Steele, M. D. 133
Bailey, William, A. M., M. D. 68
Balanitis in a Child aged three years, Case of. 27
Basedow's Disease, The Treatment of. 122
Benzanilide. 412
Berlin Cholera Regulations. 175
Bernhardt's Balm. 384
Bladder, Electrical Illumination of the, by W. R. Blue, M. D. 293
Blue, W. R., M. D. 283
Boggs, W. F., M. D. 136
Boron, Pure. 30
Brain Centers of the Emotions: Are there such Centers? 412
Bromide of Strontium. 128
Bulbar Paralysis. 120
Burns. 579
Calcium Salts, The Therapeutic Value of. 318
Cancer, Auto-Infection in. 122
Cancer, Complete Laryngectomy for. 278
Cancer, Injection of Testicle Juice in. 310
Cancer, The Mattei Cure for. 224
Carpenter, J. G., M. D. 5
Carroll, J. C., M. D. 197, 199
Cartledge, A. M., M. D. 1
Castration before Marriage. 383
Cataract Extraction, Recent Improvements in, by Allen H. Kelch, M. D. 39
Catarrh Smuffs. 318
Cerebellar Cysts. 346
Cervical Ribs. 251
Charbon, A Case of. 345
Cheatham, W., M. D. 71
Chicago Drainage Canal. 318
Childbed Fever, Prophylaxis of. 382
Chloroform Anesthesia, Vomiting in. 153
Chloroform Controversy, The. 281
Cholera. 86, 185, 215
Cholera next Summer. 445
Cholera, The. 154
Cholera, The Approach of. 188
Cholera and its Treatment. 279
Cholera Bacillus, The. 274
Cholera Bacillus, Chemistry of the. 277
Cholera Bacillus in Animals, Inoculation of. 317
Cholera Inoculations. 316
Cholera, Cremation of Bodies Dead with. 256
Cholera, The Origin and Diffusion of. 158
Cholera Outbreak, The. 188
Cholera, The Pathogenicity of. 149
Cholera in Paris. 91
Cholera Riots in Russia. 96
Cholera Prescription, A One-time. 275
Cholera Rampant. 84
Cholera Treatment of. 319
Choleraea Dejections, The Disinfection of. 319
Cholera, Treatment of the Agid Stage of. 320
Chronic Bright's Disease, The Diagnosis of. 578
Cigarette Epidemic, The. 123
Close Call, A. 416
Codeine Sulphate. 122
College of Physicians and Surgeons, New York. 61
Columbian Exposition, To Welcome Visiting Doctors to the. 87
Constipation, Chronic. 319
Convulsion Treated by Compression of the Carotid. 347
Correction, A. 349
Cow as an Enemy of Mankind, The. 320
Crime, Neuropathic Insanity in Relation to. 61
Croupous Pneumonia, The Etiology of, by Simon Flexner, M. D. 33
Culture and Professional Success. 253
Dubney, S. G., M. D. 257
Death in Chloroform Narcosis, The Cause of. 91
Deaths of Eminent Foreign Medical Men.. 448
Dentistry in Germany, Doctors of. 415
Dermatitis Tuberosa from Iodide of Potassium, Case of. 189
Diarrheal Discharges, Disinfection of. 288
Diphtheria, Diagnosis and Treatment of, by Charles W. Aitkin, M. D. 225
Disinfected Chirurgical Leather or Artificial Chamos, A New. 228
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetanus with Double Facial Paralysis, Recovery, A Case of</td>
<td>345</td>
</tr>
<tr>
<td>Therapeutics</td>
<td>23</td>
</tr>
<tr>
<td>The Wrong Place</td>
<td>182</td>
</tr>
<tr>
<td>Todd, Lyman Beecher, M. D.</td>
<td>97, 421</td>
</tr>
<tr>
<td>Thyroid Gland, The Function of</td>
<td>180</td>
</tr>
<tr>
<td>Thyroid Grafting in Myxedema</td>
<td>179</td>
</tr>
<tr>
<td>Tinned Fruits, Curiosities</td>
<td>346</td>
</tr>
<tr>
<td>Tomatoes and Cancer</td>
<td>191</td>
</tr>
<tr>
<td>Tonsillitis, Calcium Sulphide in</td>
<td>214</td>
</tr>
<tr>
<td>Torsion of Arteries, On the</td>
<td>319</td>
</tr>
<tr>
<td>Tracheotomy and Intubation</td>
<td>444</td>
</tr>
<tr>
<td>Trachoma, The Modern Treatment of, by W. Cheatham, M. D.</td>
<td>71</td>
</tr>
<tr>
<td>Thyroid Gland, The Function of</td>
<td>180</td>
</tr>
<tr>
<td>Torsion of Arteries, On the</td>
<td>319</td>
</tr>
<tr>
<td>Tracheotomy and Intubation</td>
<td>444</td>
</tr>
<tr>
<td>Trachoma, The Modern Treatment of, by W. Cheatham, M. D.</td>
<td>71</td>
</tr>
<tr>
<td>Treatment of Smallpox by means of Darkness</td>
<td>181</td>
</tr>
<tr>
<td>Treatment of Smallpox by means of Darkness</td>
<td>181</td>
</tr>
<tr>
<td>Tuberculocidin</td>
<td>160</td>
</tr>
<tr>
<td>Tuberculosis, Injections of Testicle Juice in</td>
<td>179</td>
</tr>
<tr>
<td>Tuberculosis, Injections of Testicle Juice in</td>
<td>179</td>
</tr>
<tr>
<td>Tumoral Grafting in Myxedema</td>
<td>179</td>
</tr>
<tr>
<td>Umbilical Infection in One Thousand Infants, The Study of</td>
<td>152</td>
</tr>
<tr>
<td>Umbilical Infection in One Thousand Infants, The Study of</td>
<td>152</td>
</tr>
<tr>
<td>Uncontrolled Vomiting of Pregnancy, Pathological Anatomy of</td>
<td>443</td>
</tr>
<tr>
<td>Uncontrolled Vomiting of Pregnancy, Pathological Anatomy of</td>
<td>443</td>
</tr>
<tr>
<td>Ununited Fractures by Resection, Treatment of, by W. O. Roberts, M. D.</td>
<td>357</td>
</tr>
<tr>
<td>Unwholesome Occupations</td>
<td>189</td>
</tr>
<tr>
<td>Urinary Fistula, A Case of</td>
<td>189</td>
</tr>
<tr>
<td>Urinary Fistula, A Case of</td>
<td>189</td>
</tr>
<tr>
<td>Use of Opium by Women in India, A Defense of the</td>
<td>316</td>
</tr>
<tr>
<td>Use of Opium by Women in India, A Defense of the</td>
<td>316</td>
</tr>
<tr>
<td>Uterine Hemorrhage, Treatment of</td>
<td>178</td>
</tr>
<tr>
<td>Uterine Hemorrhage, Treatment of</td>
<td>178</td>
</tr>
<tr>
<td>Uterine New Growths and Metrorrhagia</td>
<td>444</td>
</tr>
<tr>
<td>Uterine New Growths and Metrorrhagia</td>
<td>444</td>
</tr>
<tr>
<td>Vaccination Injuries</td>
<td>31</td>
</tr>
<tr>
<td>Vaccination Injuries</td>
<td>31</td>
</tr>
<tr>
<td>Vaccination and Smallpox Mortality</td>
<td>350</td>
</tr>
<tr>
<td>Vaccination and Smallpox Mortality</td>
<td>350</td>
</tr>
<tr>
<td>Ventral Hernia, Radical Cure of</td>
<td>119</td>
</tr>
<tr>
<td>Ventral Hernia, Radical Cure of</td>
<td>119</td>
</tr>
<tr>
<td>Weight of the Body in its Relation to the Pathology and Treatment of Club Foot, by A. B. Judson, M. D.</td>
<td>263</td>
</tr>
<tr>
<td>Weight of the Body in its Relation to the Pathology and Treatment of Club Foot, by A. B. Judson, M. D.</td>
<td>263</td>
</tr>
<tr>
<td>Why Must we Sleep?</td>
<td>89</td>
</tr>
<tr>
<td>Why Must we Sleep?</td>
<td>89</td>
</tr>
<tr>
<td>Wine on the Development and Growth of the Typhoid and Cholera Bacilli, The</td>
<td>275</td>
</tr>
<tr>
<td>Women in the British Medical Association...</td>
<td>252</td>
</tr>
<tr>
<td>Women in the British Medical Association...</td>
<td>252</td>
</tr>
<tr>
<td>Women Medical Students</td>
<td>411</td>
</tr>
<tr>
<td>World's Fair, Entomological and Botanical Specimens from Kentucky, The</td>
<td>64</td>
</tr>
<tr>
<td>Yale Medical Department</td>
<td>96</td>
</tr>
</tbody>
</table>
Original Articles.

THREE FATAL CASES.*

BY A.P. MORGAN VANCE, M.D.

In the daily work of the surgeon he is often confronted with cases that he would not choose to operate on for the sake of statistics, but which he is compelled to undertake as giving the only chance for the patient's life. It was my misfortune during last month to have two such instances, both proving fatal after the operation, and a third death following an operation done for convenience only. They are all interesting and more or less instructive.

Case 1. P. H., colored man, aged fifty-eight, from Daviess County, was brought to me by Mr. Richard Walton for my opinion concerning an enlargement of his left shoulder-joint. The growth had commenced more than a year before, and had been treated for rheumatism. During the last six months a very rapid increase had taken place and great pain was present. He had lost quite fifty pounds in weight during the year. He appeared pretty well nourished, however, and had a fair pulse, though quite rapid. The upper half of the humerus was very enormously enlarged, semi-solid, and tender on pressure, very little movement of the joint being allowed. Large veins were present over the tumor, and tremendous pulsation was found in the axillary region. A diagnosis of osteo-sarcoma was made and a very grave prognosis given. When the matter

*Read before the Louisville Medico-Chirurgical Society, November 25, 1891. (For discussion see p. 19.)

was laid before the patient, he chose the meager chance offered of prolongation by the amputation, one out of two being the estimate given him.

On October 5th, in the sky parlor or negro heaven of the Louisville City Hospital, the operation was done, Dr. W. C. Dugan and the house staff assisting me, Dr. Bullock and several others being present. Dr. Miller compressed the subclavian, and the arm was disarticulated and all hemorrhage checked in five minutes. This was very rapid work considering the size of the tumor and its blood supply. The loss of blood was very great, though none escaped from the main vessels. The man was put to bed in pretty bad shape, but rallied well in two hours, and for six or eight hours appeared to be doing very well, but after this he gradually grew weaker, and died ten hours after the operation.

Case 2. Mrs. Isaac, colored, aged forty-four. I saw this patient first four years ago. She was the subject then of a very large umbilical hernia which was inflamed. The sac being distended with fluid, I tapped this then, and never saw her again until September of this year, when I was called on account of a very large tumor of the abdomen, which she says had grown in two years. There certainly was no abdominal tumor when I first saw her. She had been incapacitated from doing her work for a year, and was hardly able to get about, the tumor was so large and heavy. The hernia was still present, though no longer inflamed. The tumor and hernia reached to her knees when she stood up. She had never had excessive hemorrhages, but menstruated regularly. A diagnosis of fibroid tumor of the uterus was made, and an operation advised, the same estimate as to probabilities being given as in Case 1. She not only accepted the
conditions, but begged for the operation. Abdominal hysterectomy was accordingly done on October 18th, Drs. McMurtry, Dugan, and others assisting. Dr. W. W. Potter, of Buffalo, was also present. There being no place where colored people can be taken to have surgery of this kind done, I had to be satisfied with the cottage in an up-town alley, where I found the woman. One room of this was emptied and whitewashed, only the bed being retained, which had been also washed. After this was done it was not a very bad place for the work. Miss Buxton, the district nurse, rendered me valuable services in getting the patient ready, and she was in excellent condition when the operation was begun. An incision about twelve inches in length was made from pubes upward—the hernia necessitating this method—the hernial tumor being avoided completely, the incision passing to the left. When the large fibroid was exposed it looked almost impossible for it to be removed. There were extensive omental adhesions, the vessels of which were as large as one's fingers, but by the use of the large clamps these were separated and the tumor quickly delivered; and but for the time lost in tying off the broad ligaments the whole operation could have been finished in less than half an hour, but one hour and five minutes were consumed before she was closed up and gotten into bed. For a full hour during the operation she was in good shape, but was pretty well collapsed before getting to bed. She recovered, however, and did well for fifty hours, when she began to fail, and died at sixty hours. There was great distension of abdomen, though there was no peritonitis as proven by the post-mortem.

I think it is a mistake to attempt to tie off the broad ligaments if it is possible to get the pedicle sufficiently long without; the wire will control them better than anything else, and we avoid the danger of the two intra-peritoneal stumps. I believe this woman would have recovered if I had followed my first inclination in this regard. She would have lost no blood, and would have been in bed in twenty minutes, with a pulse of 74, instead of the end of an hour, with a pulse of 140; but, fearing the great tension on the pedicle, I followed the other plan.

Case 3. J. B., aged sixteen, an old case of infantile paralysis of both lower extremities, completely helpless. Ten years ago I straightened him out, and fitted braces which enabled him to get about on crutches for two years. The braces being outgrown, he relapsed back to his former helpless condition, always begging his mother to have the operation done, which was advised when I first saw him. On October 4, 1891, the operation of double excision of both knees was done at Sts. Mary and Elizabeth Hospital, Dr. Dugan assisting, the whole operation occupying one hour. The boy stood the double operation very well, and went to bed in good condition; was still doing well the next day, playing the French harp, and giving other evidences of being unimpressed by the surgery. On the third morning, however, I found his pulse 170, countenance anxious, and an eruption over his body resembling very much ordinary nettle rash, except that the whelks were universally crescentic in shape. There was little or no itching; temperature 101°. Salines were given, and the next day the dressings were removed, not because of any great discomfort, but that I might look for the cause of the cardiac symptoms. The rash was by this time quite general over his body, except around the operation field, which was found just as it had been put up, no sign of pus or redness even being present. The patient's appetite was fair all the time. His temperature once went to 103°, but usually it was about 100°, the pulse remaining in the neighborhood of 170. There was never any swelling or evidences of inflammation of the knees. On the eighth day the left thumb became inflamed, but not tender. The boy was never delirious. He died at the end of ten days. Ether was the anesthetic, and the condition of the lungs was hard to obtain on account of the excessive heart's action and the existence of very marked lateral curvature of the spine. I think endocarditis was the cause of death. No post-mortem was allowed. Dr. Smith, however, examined the knees, and found that he could press out an oily material mixed with blood and fat or pus. There was marked fatty degeneration of the bones, as was found in the three other cases of infantilic
paralysis where I have done excision. All these healed and have much improved and useful limbs.

LOUISVILLE.

SOME CASES OF NASAL SURGERY.

BY W. CHEATHAM, M. D.
Lecturer on Diseases of the Eye, Ear, Throat, and Nose, University of Louisville.

Mrs. F. has for some time had an intense frontal neuralgia. All treatment usually pursued in such cases has failed. I found superior turbinated tissue much inflamed and hypertrophied and engorged. I applied the galvano-cautery to this tissue, puncturing it many times. In a few days all inflammation subsided, and the patient has had no trouble. This is only one case of many similar. This swollen tissue simply plugged and stopped all communication between the frontal sinuses and the nose, preventing the natural secretions from escaping. These secretions undergo decomposition, generating gas, which by pressure causes the pain. Of course other than surgical treatment is indicated afterward.

In a majority of the cases of abscess of the accessory sinuses, especially in abscess of the antrum, the primary cause is in the nose in the form of polypi, nasal hypertrophies, and engorgement of turbinated tissue, which prevent the escape of the natural secretions of the part, or cause an extension of the nasal inflammation into these cavities, resulting finally in formation of pus. The anterior molars are usually considered the cause; it is true in many cases of antral abscess the roots of an anterior molar may be necrosed, but in many cases it is the effect and not the cause of the antral abscess; whether cause or effect, if such nasal complication as mentioned exists, the antral abscess will not be relieved until such complication is removed. A new operation has been lately devised for the drainage of antral abscesses: an opening is made from the inferior nasal meatus into the antrum. The slower and older operation, in my estimation, must be the better.

Surgery of the nose of course gives much benefit in cases of mouth-breathing. The nose is for smelling, and to filter, heat, and render moist the air we breathe. It is said, no matter how cold the external air, that if it passes through the nose it is heated to near body heat, and that the nose when in a normal condition furnishes from twelve to sixteen ounces of fluid to give the inhaled atmosphere its proper humidity. Surgery of the naso-pharynx is of much importance in the cases last mentioned. A mouth-breather, even with his mouth closed, can be recognized anywhere. The facial expression makes the diagnosis. The growth of many children is stunted, and the child made quite stupid because of nasal or naso-pharyngeal obstruction.

Asthma, and especially that form known as "hay asthma," is frequently relieved by treatment of the nose. I dare not say how many cases of asthma I have relieved by nasal surgery. The so-called asthma centers are located in the posterior two thirds of the nose and in the pharynx and upper part of the larynx. I have seen many cases of asthma, which had existed for years, relieved in a few moments by the removal of a nasal polyp or turbinate hypertrophies, or by the application of some of the acid caustics or the galvano-cautery to the asthma centers in the nose. There are sometimes relapses, with a return of the original cause; the operation is repeated, and relief again given. Some cases of reflex asthma can be differentiated by the use of local anesthetics or some irritants, the former relieving the attack, and the latter bringing on an attack, or, if there is one, making it more severe. Spurs of bone from the septum infringing upon the turbinate, or a deviated septum may produce asthma. If cocaine is used in these cases, it is better to use it from behind forward, as thus it better reaches the sensitive areas. Self-use of this medicine, or even a knowledge of its effects or name should not be permitted the patients. The primary action of cocaine used in the nose is the same as if used in any other part of the body; the effect is very seductive. To prevent the patient knowing what he is using, and to prevent its excessive use, I write for benz. meth. egonin murirate, or alkaloid, and write on the prescription a request that it be not refilled.

It will be seen that surgery of the nose is of much importance; but, as in surgery of other
parts of the body, I believe the pendulum has swung too far, and that much of it being done now, even by good men, will in the end result in much harm; but in the hands of the conservative men it results in much permanent good, and its effect is wonderful in many cases of headache, facial neuralgia, abscesses of the accessory nasal sinuses, asthma, and in many other reflex troubles, especially obstinate coughs.

Louisville.

PNEUMONIA.
BY E. S. M'KEE, M.D.

Schaeffer reports a case of herpes ophthalmicus which came on five days after a left-sided croupous pneumonia. The doctor believed, with Weigert and Kaposi, that herpes zoster is an infectious disease, and that erysipelas, pneumonia, and zoster are children of the same genus epidemicus.

Aufrecht reports cases of hemiplegia following pneumonia of the superior lobes in children. He considers that, similar to what occurs in uremia, the pneumonia paralysis is occasioned by extension of the edema into the brain substance. This is rendered possible through the changes in the blood, and is especially easy of occurrence in pneumonia of the superior lobes, as in this case the flow of the venous blood to the heart is made more difficult.

Phillips reports an interesting series of cases where acute nonseptic pneumonia followed as a complication of the puerperal period.

Olivia describes pneumonia with icterus in three different classes, viz., pneumonia with icterus in consequence of venous stasis in the liver, pneumonia with icterus from stoppage of the gall-duct, pneumonia with icterus from general infection.

Kidd affirms the existence of a subacute lobar pneumonia distinct from the acute classical type, characterized by a tendency to fibrous and necrotic changes in the lungs. The indurative process may be mainly or exclusively interstitial. It may be represented wholly or in part by organization of an alveolar exudation, or may comprise both of these lesions. The anatomical differences may imply a correspond-
a series of acute pneumonias in a family where there seemed every reason for believing that contagion was the cause of the spread of the disease. He thinks the father acquired the disease outside, and it was conveyed in turn to the members of his family through the sputa. Examination by Professor Garwitz of some of the fluid drawn from the lung showed bacilli resem-bling rabbit septicemia, but neither the pneumono-bacillus of Friedlander or the pneu-mono-coccus of Fraenkel was found. He believes that many varieties of poison may give rise to pneumonia, but that the main lesson in the case is the contagiousness and the need of a careful disposal of the sputa by disinfection or otherwise.

Pietrzikowski calls attention to the frequency of pneumonia after strangulated hernia, both when relieved by taxis and by herniotomy. He records the clinical observation made on four hundred cases. The result of his experimental observation was that of one hundred and fifty dogs in which artificial herniae were made, and when reduced ten showed marked lesions of the lungs, and in six lesions of the liver were observed. In all cases thrombus was the cause.

Buchmueller reports on an epidemic of pneumonia in which he could not exactly point out a contagion from person to person, but was of the opinion that the exciting cause of the disease spread over the place like a kind of mi-asma.

Williams is of the opinion that pneumonia is a blood and not a lung disease, and resembles in its course the zymotic diseases.

Cynne reports an epidemic of pneumonia which occurred in Sheffield. In some cases it was possible to trace the attack to distinct infection.

Townsend reports a long list of cases occurring in Boston, and though many of them may be simply coincidences, some at least bear out the idea of infectiousness as regards acute lobular pneumonia.

Herbert reports a case of pneumonia from a peculiar cause. A young Arab died shortly after admission. Post-mortem showed lower left lung in state of gray hepatization. In dividing the root of the lung, a common male round worm was cut across. Its tail end lay in the main bronchus, whence it extended downward into the posterior part of the lung into successively smaller tubes to its head, which filled the tube in which it lay. The worm was alive, 4.75 inches long, and paler in color than three other large female ones found in the stomach and duodenum.

Bozzolo reports having found the diplococcus in the milk of a patient who was suffering from pneumonia.

Sokoloff, after careful observations on 2,360 cases, concludes that there can be no doubt that croupous pneumonia is an infectious disease which is, in hospitals, transmitted from patient to patient, or from neighbor to neighbor, much the same as in erysipelas. By isolation and disinfection he has succeeded in reducing the complications in pneumonia from thirty five to fifteen in one year. He recommends that every hospital keep special wards for patients suffering from pneumonia, and wards which have been occupied by pneumatic patients should only be used by others after the most careful disinfection.

Levy reports a case of fibrinous pneumonia of congenital origin. The mother died of fibrinous pneumonia complicated with pleurisy and pericarditis. The chest was aspirated, and a sero-purulent fluid removed which gave cultures showing the diplococcus of Fraenkel and Weichselbaum. Inoculations were made with the fluid, which demonstrated the presence and potency of the germ. The child of this woman, born thirty-six hours before her death, died two days after birth of hemorrhagic catarrhal pneumonia, with lobar fibrinous pneumonia, and the autopsy demonstrated the fact that the pneumonia from which the child died was infectious, and had persisted at least thirty-six hours before the child was born. Cultures made from fluid drawn from the left ventricle of the heart and from the right lung demonstrated the presence of the diplococcus. The micro-organisms were especially numerous in the blood, and the conclusion was reached that the infant was infected through the mother.

Platani has experimented extensively on the etiology of pneumonia. He has produced pneumonia by inoculating the microbe by the natu
ral passages, at the same time favoring the result by aseptic traumatism of the lung through the thoracic parietes, or causing the animal to inhale irritant gases, as ammonia, hydrochloric acid, etc. He has found some degree of traumatism at the point of inoculation to be necessary, as thus the vital resistance of the lung is weakened. It was not enough that the pneumococcus be simply inhaled, and all such experiments failed to produce the pneumonia. Animals after inoculation, placed in a frigorific apparatus, invariably succumbed after a brief time. Then they invariably succumbed more readily, had a more elevated temperature and more extensive pneumatic lesions than animals similarly inoculated but not exposed to cold. He then studied the action of chilling alone, with negative results.

Crocq made his disbelief in the causes of the disease being either Friedlander's bacillus or the diplococcus of Fraenkel and Weichselbaum. His experiments have been negative.

Bordas finds the following as the result of his researches: The true pneumococcus is found in all fatal cases of pneumonia. It has also been found in the fluids of the inflamed ear after influenza. The blood contains no trace, but the spleen frequently has traces of this micrococcus. The streptococci seem characteristic of bronchitis and broncho-pneumonia of influenza, but not of true pneumonia. They differ only by the extent of their multiplication. The disease is infectious, and may even become contagious. The bronchitis of influenza, according to M. Bordas, is characterized by streptococci, the pneumonia by pneumococci.

Sée and Bordas make an extensive report of their researches for the pneumococcus in the fibrous pneumonia consequent to la grippe. Their researches lead them to consider pneumonia not only as a local malady of infectious origin, but also as a disease which may become infectious in the sense that it may invade other organs.

Jaccoud relates an interesting case, where a man suffered from a facial neuralgia associated with an irritation and hypersecretion of the right frontal sinus. These two conditions were coincident, and came on with mathematical periodicity—a periodicity pertaining to the day, hour, and minute. Recovery was very prompt under quinine. Pneumococci were found very numerous in the secretions. This led him to think of the otitis which occurred in the late influenza, but the patient did not have the influenza. According to Netter, when one has had the pneumonia he has pneumococci always in his saliva; but this patient never had pneumonia. Observations have multiplied which show that the pneumococcus is not noxious.

Debove reports a case of meningitis and peritonitis having pneumococci, but no pneumonia being present. Netter, in discussing the report, said that pneumococci in peritonitis were very rare. It did not occur in one hundred and eight autopsies in which he had looked for it. He has met with meningitis with pneumococci in twenty-one out of thirty-three cases, and he has collected forty-five cases by other authors in which it has occurred twenty-seven times.

Queisser has examined the lungs in a number of children and adults suffering from pneumonia, and he finds the coccus of Fraenkel and Weichselbaum the usual bacterial cause of true croupous pneumonia. This coccus was also found in the majority of cases of true croupous pneumonia.

Grevoto has made a large number of examinations of the kidneys of patients who have died of pneumonia. He found only inflammatory changes, and the Fraenkel diplococcus was never present. He recalls the investigations of Lucretio, which went to prove that the blood of persons afflicted with pneumonia is generally free from pneumococci.

Canfield, at the Johns Hopkins Hospital Pathological Laboratory, Baltimore, has isolated Fraenkel's diplococcus from the blood and tissues of rabbits killed with Dr. Sternberg's sputa. He has also obtained the same organism from rabbits killed with prune-juice expectoration.

Sturgis and Coupland, in regard to direct infection, assume a wise reserve qualified with skepticism. The vexed pathological question as to whether the disease is general or local, zymotic or idiopathic, is approached in a spirit of compromise.

Pignol has been experimenting on tracheal
injections in the treatment of pneumonia. The patients were subject to an injection of naphtol, 0.20 centigrams to 1,000 of water, and the quantity used at one sitting was 200 to 300 cubic centigrams. One received four injections, the other only two. The injections were well tolerated, and did not cause any complications. The patient said there was an immediate diminution of dyspnea, and shortly afterward rales were heard in points where there had been souffles. In one case the fever fell while the pneumonia was just commencing; in others there was considerable amelioration.

**Treatment.** Crocqge gives plumbi acetatis in 40 centigrams to 1 gram in twenty-four hours. Treatment can be prolonged to fifteen days. The indications for this treatment are pneumonia in a vigorous subject with pronounced inflammatory action with bloody expectoration; also the pneumonia of debilitated and broken down persons, alcoholics, and diabetics.

Chitic advocates mustard leaves and cotton and an oil silk jacket in preference to poultries, which are heavy and wet. He checked the initial chill in one case by two doses of $\frac{1}{100}$ of a grain of nitro-glycerine. He always used the carbonate of ammonia first, and alcohol next, but resorted to nitro-glycerine when these were unsatisfactory.

Cornell reports two cases of very severe and sudden onsets of pneumonia which he treated very successfully by phlebotomy. From the one sixteen, from the other eight ounces of blood were withdrawn from the median basilic vein.

Stowell, in a study of one hundred cases in children under ten years of age, has found treatment in unsanitary quarters not so unpromising as would be suspected. Alcohol is not needed. Antipyretics weaken a child more in proportion than they do an adult. Many mild cases become severe and fatal in spite of treatment, and no cases are so bad that the physician should not do his utmost to save. Many cases get well with little care and less medicine.

Waugh has had prompt results from 30 grains of citrate of potash and 5 grains of the nitrate every two hours. He also has the chest rubbed with thapsia ointment, 15 per cent in oleite.

Bigg sums treatment up in the terse statement, "Sustain the heart and husband the nerve force."

Welch treats alcoholic delirium in pneumonia with chloral and digitalis in frequently repeated doses.

Netchaef reports favorably on the use of the tincture of capsicum in the pneumonia of alcoholics.

Clemens has great success with the administration of chloroform. At the end of twelve hours the fever is abated. Alcohol may be mixed with the chloroform. The inhalations produce the defibrination of the blood in the lungs, and thus prevent hepaticization. It has also, doubtless, a dynamic action on the brain and pneumogastric nerve. A case is also reported by Phillipi. 46

Winnett, Knox, Carson, Parham, Hodge, Hyten, Bodley, Pratt, Waugh, Collins favor the use of ergot in pneumonia, a favorite combination being with tincture of gelsemium.

Chambers reports favorably on the continuous use of oxygen gas.

Simpson has used with benefit a new form of bleeding, which he terms pulmonary phlebotomy, and which consists of thrusting the aspirator needle directly into the engorged lung, and relieving it of accumulated blood.

**Cincinnati.**

**A Case of Hydrocephalus.**

BY HENRY E. TULEY, M.D.

Senior Assistant Physician, New York Infant Asylum.

Sadie S. was seen first July 9th at New York Polyclinic by Dr. L. Emmett Holt, to whose clinic she was brought for treatment, and was sent by him August 14, 1891, to the New York Infant Asylum, Mt. Vernon, N. Y., where she remained under our continuous observation till her death, October 4th, aged four months and twenty-five days. Dr. Holt has kindly consented to my reporting the case.

She was the fourth child of healthy German parentage, other children living and doing well. Labor natural, head noticed to be large and soft at birth, with bulging fontanelles. When first seen, head measured 19 inches in circumference, and on admission to the institution August 14th
five weeks later, it measured 21 1/2 inches in circumference, and 19 inches from ear tip to tip, the chest measurements being 14 inches.

From August 14th to October 4th she made an average weekly gain in weight of four ounces, with increasing attenuation of the body. Regular measurements of the head showed an average weekly increase in circumference of half an inch.

Maximum temperature reached while under observation was 100.8°; the minimum 98°, save during the last week of life, when it ranged between 96° and normal. During the middle of September there was a marked increase in the number of respirations, they on several occasions being 120 to the minute, with no apparent constitutional disturbance resulting.

Veins of scalp very prominent, skin tense. From the first there was a slight divergent strabismus, which gradually became more marked as the head increased in size, the axis of the eyes being directed upward. Pupils active, and eyes follow light; at no time were there any contractures, rigidities, or convulsions. Knee-jerk slightly exaggerated.

Body small and poorly nourished, but well formed, there being no deformities present. Peripheral circulation poor; only kept warm by artificial heat, the appliance used in preference to hot water bags being a cone made of tin, under which is placed an ordinary lamp. The heat is conducted by means of a pipe, a continuation of the cone, the end of which, placed between the bed-clothes, can be shifted about as indicated to warm extremities or body, the temperature being regulated by the height of the flame. She slept fairly well, recognized the bottle, and took food with a relish, about eighteen ounces in twenty-four hours.

There was a constant subacute gastro-enteric catarrh, with an occasional regurgitation of food. As the head grew larger, bed-sores developed on each parietal region about the size of a silver five-cent piece.

During the latter part of September there was gradual failure. She became generally cyanotic, pulse small and feeble, with gradually increasing prostration. She died quietly on October 4th.

Autopsy by Dr. Holt, 12 hours after death: Head was translucent, measuring in circumference 24 1/2 inches, from ear tip to tip 16 inches, and from occipital protuberance to bridge of nose 20 inches. Eighty-eight ounces of clear serum was withdrawn by trocar, the head then resembling the classical "bag of bones."

The brain, on opening the cranial cavity, was found to be very thin, and was removed with great difficulty, in its thickest portion at the base varying from one half to one fourth of an inch in thickness. Over the convexity it was reduced in most places to one eighth inch or less. Over the frontal lobes on both sides were areas where no brain substance was seen, the pia and lining membrane of the ventricles being in contact, the brain here resembling a distended intestine. There was free communication between the lateral ventricles and the third ventricle at the base. The medulla, pons, and cerebellum appeared normal. There was no sign of basilar meningitis or tumor. The central canal of the cord was not opened.

Analysis of the cerebro-spinal fluid showed it to be colorless, of alkaline reaction, with a specific gravity of 1005. There was present a trace of albumen, chlorides of sodium and potassium, and phosphoric acid combined, in all probability, with sodium and potassium.
Liver, spleen, kidneys, and stomach were normal and but slightly congested. Heart normal. Lungs slightly congested, with a small spot of broncho-pneumonia in the right apex. Jejunum and upper ileum congested, with few submucous hemorrhages. The remainder of the gut was normal.

**MT. VERNON, N. Y.**

"FIND THE CAUSE AND TREAT IT."

BY U. H. ION, M.D.

During the winter of 1874-75 I took some notes of the lectures of the late Prof. L. P. Yandell, jr., and the advice which forms the subject of this paper was given fifty-eight times. Soon after I began the practice of medicine a little girl, three years old, was brought to my office "on account of her eyes." Examination revealed them to be oscillating laterally about sixty times per minute. A lawyer who was present said, "In one of my children that would mean convulsions." I had never seen, heard, nor read of such a case, nor did I know what to look for. In much less time than it takes to write it the advice, "Look to the cause and treat it," occurred to me. "You may not be able to name it, but find the cause," kept ringing in my ears.

A glance at the general appearance of my patient disclosed general debility, and to the father I ascribed this to be the cause. I prescribed dialysed iron liberally every four hours. Result: In less than a week the oscillations disappeared, to return soon after the tonic was omitted. The administration again and again removed the symptoms until the general health was restored and the oscillations disappeared.

It was probably a year after this time, while turning the pages of a medical book, I saw the word "Nystagmus," and curiosity impelled me to "look it up." It was not long until I was reminded of my little patient whose disease I could not name; but by the removal of "the cause" I cured the girl.

This is but one of many instances (not of nystagmus) where the adherence to this principle helped me out of embarrassing situations and resulted in the cure of my patients.

**Bloomington, Ind.**
tainly and rapidly fatal cases were those which had been roughly handled.

To make this diagnosis it is not necessary even to lift the limb from the bed, to make any great amount of extension, or more than slightly and quietly to rotate the limb. The behavior and appearance of the great trochanter is the keynote of the situation.

Should there be no impaction present in fracture at the base of the neck, the author would consider a positive diagnosis almost impossible, but should try to base it on age, direction of force, rotation of femur on its own axis, and signs of injury to great trochanter.

Afternoon Session.

Dr. P. Richard Taylor, of Louisville, Ky., read a paper on Intubation in Diphtheria. He reported four cases of intubation, selected from a number during the recent epidemic of diphtheria in Louisville, two of which were fatal, and two successful.

Case 1. October 29th, he was called to intubate the larynx of Robert W., aged seven years and five months. Tonsils and larynx showed diphtheritic patches; larynx tumefied, but no membrane present. Temperature was 102.5°; pulse 150, and thready. The dyspnea was distressing. A tube, the size required for an eight-year-old child, was introduced into the trachea, which relieved the dyspnea immediately. At the end of an hour respiration was 22; pulse 140. A spray of peroxide of hydrogen was used every hour. The tube was removed on the seventh day, the child recovering.

Case 2. R. H., aged two years and eight months. Diphtheritic membrane in the nares and pharynx, on the tonsils and tongue and in the larynx. Child sick forty-eight hours; temperature was 102°; pulse 150; dyspnea excessive and progressing. A tube, the size required for a child three years old, was introduced into the larynx, relieving the dyspnea immediately. On the morning of the third day the temperature was 101°; pulse 140; face flushed; membrane yellow and breaking down. A spray of peroxide of hydrogen (15 volume) was ordered to be used every hour. Child died on the afternoon of the fifth day from septic poisoning.

Cases 3 and 4 were similar to those reported. The author said that intubation, in diphtheria, is indicated as soon as dyspnea becomes progressive and is due to laryngeal obstruction resulting either from false membrane or tumefying of the mucous membrane and surrounding tissues, under which conditions the introduction of the tube gives immediate relief.

The nourishment must be liquid, or else in the form of ices, and must be administered by the spoonful, the patient either sitting in the upright position or lying on the side, and taking the entire contents of the spoon at one swallow to prevent the passage of the liquid into the tube.

The removal of the tube, between the fifth and the ninth day, ordinarily, is safe, but in some cases he has left it in position as long as twelve days. Its removal leaves the vocal cords stretched wide apart, the epiglottis standing almost straight and stiffened from being held for several days in one position, and also leaves it unable to perform its normal function, rendering it necessary for one or two days longer to give liquid food by a spoon.

In two cases cited death resulted from septic poisoning and heart-clot, and frequently exhaustion is the fatal cause. The specialist renders breathing possible, yet he with the general practitioner can give but a grave prognosis in diphtheria.

Dr. Lewis C. Cline, of Indianapolis, thought the trouble with general practitioners in performing the operation of intubation was due to a lack of confidence in themselves. When he took a special course under O'Dwyer, in New York, he said O'Dwyer gave a public exhibition of his method on a dead baby to the doctors attending the Post-graduate School, and, of the fifty-five physicians who saw the operation, only three succeeded in introducing the tube into the larynx in one hour's time. The operation had to be studied thoroughly before it could be done dextrously. It was simply mechanical. Every physician should learn to do the operation. If the diphtheritic trouble extends down into the trachea very far below the larynx, he thought that neither intubation nor tracheotomy was of any consequence, and that these measures only added
suffering to the patient. Where, however, it is located entirely in the upper part of the larynx, so that the tube will pass through, relief is immediate. He had intubed in three cases, the first one being a success. In two other cases the introduction of the tube did no good, because the diphtheritic membrane had extended down the trachea, and the tube would not pass the obstruction.

Dr. A. B. Richardson, of Cincinnati, said he had been interested in this subject of late, simply from the reading of papers in regard to it. At the last meeting of the Ohio State Medical Society, Dr. Goodhue, of Dayton, read a paper giving statistics of 27 cases in which he operated, with a mortality-rate of 40 or 45 per cent. Since then, in a paper read before the Cincinnati Medical Society, Dr. Goode had given statistics of 27 cases with about the same rate of mortality.

Dr. Richardson thought there was very little variation on the part of operators in the technique of the operation; but the rate of mortality was interesting, and the question comes up as to whether it is an improvement over tracheotomy. He believed the general opinion of operators was, that intubation was less formidable in its aspects at least, and consequently more acceptable to the friends of patients, and more easily done. It does not require anesthesia, and offers as good, if not better, prospects for recovery, consequently it is to be preferred to tracheotomy in most cases.

Dr. Taylor said the mortality in intubation was between 40 and 60 per cent. A doctor's percentage fluctuated according to the virulence of an epidemic. The operation of tracheotomy was about abandoned for cases of diphtheria, but for foreign bodies in the trachea it was a good operation, and as a rule successful. For the removal of diphtheritic membrane it is a failure.

Dr. McCoy would like to know when and when not to operate. He had had several cases of diphtheria from time to time which had terminated fatally.

Dr. Taylor: As to diagnosis, or when and when not to operate, that depends upon the physical examination, of finding where the obstruction is, of telling whether the membrane has extended down the larynx or not. This could be determined by using the laryngeal mirror, etc.

Dr. William Freeman, of North Madison, Indiana, had met with a large number of cases of diphtheria during twenty-six years of practice, but could hardly believe that 30 per cent of the cases were due to laryngeal stenosis. He did not believe that one half of the cases he had seen, in which the larynx was involved, were fatal.

Dr. E. S. Elder, of Indianapolis, said that intubation of the larynx was an exceedingly valuable method of treatment, and comes in as a life-saving remedy when other measures failed. One of the most frequent causes of death in diphtheria was heart failure. We know that if dyspnea continues for a long time it tends to weaken the heart rapidly, and it is a potent factor in the causation of heart failure. If we could maintain a vigorous circulation, he thought the obstruction would pass off after a while. Most operators restricted intubation to laryngeal obstructions alone; but since the introduction of the operation a great many physicians had "gone wild" over it, and had made exaggerated claims for it, resorting to it in cases that were hopeless from the first, hence he thought more or less odium had been attached to the operation.

Surgical Treatment for Nasal and Naso-Pharyngeal Reflexes was the title of a paper read by Dr. Lewis C. Cline, of Indianapolis, Ind. To have a reflex phenomenon we must have an irritation produced in a sensitive nerve connected with a nerve center or spinal cord, and this in turn must be connected with a motor fiber joined to a motor organ, which may be located in an entirely different organ or part from that in which the irritation is produced, as migraine from indigestion or uterine irritation, etc., which may result in a pathological lesion or a train of morbid symptoms. In no part of the body do we find the reflex tendency so great as in the naso-pharyngeal and respiratory regions, hence we should not be surprised to find the nose a frequent source of reflex phenomena. The first to call attention to nasal reflexes was Voltolin, who describes a case of spasmodic asthma due to nasal poly-
pus, which was cured by the removal of the growth.

All writers on this subject recognized the importance of investigating the condition of the nasal membrane in these diseases. In 1886 Bosworth published a paper in which he argued that the prominent predisposing cause of nearly all cases of hay-fever was due to obstructive lesions of the nose, in this way giving rise to vascular dilatation behind the point of obstruction, thus rendering the parts more susceptible to the action of irritating influences; and this in fact may or does account for many of the reflex phenomena that are met with, such as supra-orbital neuralgia, hay-fever, asthma, some eye reflexes, chronic laryngitis, etc.

Sir Morel Mackenzie recognizes the fact that in a great majority, if not all cases of asthma, the mucous membrane of the nose presents evidence of disease.

To sum up, there were three essential conditions necessary for the production of an exacerbation of hay-fever or asthma: (1) The presence of pollen or some irritating substance in the atmosphere; (2) a neurotic habit, and (3) a local morbid condition of the mucous membrane. These three conditions are present in all cases, and any individual is liable to an attack in whom one or more of these conditions are absent. Now, since a large per cent of the cases have obstructive lesions, and all are exposed to the influences of dust and pollen at certain seasons of the year, we must look to the curing or bettering the conditions of the nose and naso-pharynx, such as deformed septums, spurs, tumors, hypertrophy of the turbinate and adenoid tissue of the vault and tongue.

Dr. Cline reported several cases illustrative of the effects of surgical treatment.

Dr. P. Richard Taylor, of Louisville, thought that Dr. Cline's method of disposing of hypertrophied tissue in the nose, or any other portion of the body, with the galvano-cautery was not the best; that the knife was far more preferable, inasmuch as it left no devitalized tissue in its track. It leaves a perfectly smooth and healthy surface, which becomes covered with epithelium. Scar tissue was the first tissue to break down where the galvano-cautery was used in an inflamed surface. In hypertrophied tissue of the turbinated bones, or tissue with increased vascularity, we cause shrinkage immediately around the point at which we burn; in other words, we make a cicatricial streak through the hypertrophy. He had noticed that patients were more liable to take cold when the galvano-cautery was applied to hypertrophied tissue. Wherever it is practicable to remove hypertrophied tissue, he thinks it is best to remove it with a clean-cut instrument, one that leaves no devitalized tissue in its track. The surfaces will heal much quicker under the knife than with the galvano-cautery.

Dr. A. B. Richardson, of Cincinnati, said he was interested in the subject of reflexes from the standpoint of the neurologist, and thought that the position taken by the essayist was unquestionably correct, that many of the reflex neuroses were due to local irritations in the nose, pharynx, larynx, etc., and it is not necessary that these reflexes should exhibit themselves only in organs immediately connected with these, that they may present themselves by symptoms in various portions of the body where there does not seem to be any other connection than that they are in the same organization. There was no doubt but what many brilliant successes were reported from the correction of the various local irritations. There were cases of _noli me tangere_, that is, if the individual is touched or treated in any way it results in an aggravation of the reflex. This was not an argument against the correction of the reflex, but it simply served as a warning to specialists as well as general practitioners that they must not hope for success in every case. The probability of success depends upon the relation that the local irritation bears to the general neurotic tendency in the individual. If the neurosis is marked, if there is an extreme tendency toward irritation, if there is an extreme susceptibility to impressions upon the nervous system of the individual, we must expect frequently, as the result of our attempts to correct the irritation, that we will aggravate the tendency, that we will increase the susceptibility, and that instead of finding our patients benefited as a result of local treatment, we will find them injured.
Then we must take into consideration the psychic element in each case. The patient's attention should be concentrated upon the treatment. If we improve the local condition we do much toward making the patient believe that we are removing the trouble. We know how much the psychic impression has to do with the ultimate result in these cases. By modifying the local symptoms we do much to remove the reflex. On the other hand, if we have a very susceptible organization, with a tendency to the development of psychosis, the irritation results in decided injury. The tendency toward the development of psychosis is increased by local treatment, and the result is that the patient is not benefited, but made worse by treatment.

Dr. A. J. Banker, of Columbus, Ind., corroborated the theory advanced by the essayist. He recalled the case of a patient who had derangement of the digestive organs and impairment of the nerve centers. The patient became a confirmed invalid; he was unable to sleep, and could scarcely eat—in fact, the patient found comfort in nothing. He had been treated for catarrhal difficulty. On close inspection he found two polypi, one hanging behind the soft palate nearly the size of a hickory nut; the other was in the posterior naris, which was seen by a reflected artificial light, and which was removed with great difficulty. The patient, after the removal of the first polypus, had a severe attack of inflammation of the structures about the nose. It brought about an attack similar to the one he experienced several years prior to that time. The nervous system had become in a tonic, clonic spasm, and he was confined to his bed for months. The same symptoms followed the removal of the second polypus, which he had labored under for some time. After the removal of the second one there was no further difficulty. He has since remained comparatively well. In taking cold the same train of symptoms returns.

Dr. Banker had used both the galvano-cautery and the knife, and so far as the effect is concerned he could see no difference. He thinks, however, that where there is a neurotic condition emitted from the point of irritation, which has continued for a considerable length of time, we get a more decided effect on the nervous system by the galvano-cautery. He thinks there is an effect produced from the heat and galvanism upon the peripheral extremity of the nerve over and above that of any other source of application or treatment.

Dr. Lewis C. Cline, in closing the discussion, said that one of the objections to the use of the knife was hemorrhage, which sometimes was difficult to control, and the operation had to be deferred in consequence of it. He, however, uses the knife in some cases, but he carefully selects those cases. When we come to treat hypertrophies in the nose, such as we find in the posterior end of the turbinates, it is difficult to see them without a palatal retractor. Dr. Cline finds that when he uses the cold snare, and removes growths by degrees with a view of preventing hemorrhage, it is much more satisfactory than with the knife. With the knife he gets an unusual amount of hemorrhage, hence he is a little skeptical in regard to its use. Some people, he thought, were prejudiced against the cautery, but in his judgment no more harm resulted from its use than the knife.

Dr. Moses N. Elrod, of Hartsville, Indiana, read a paper entitled The Correct Pronunciation of Medical Terms, in which he cited numerous examples of words that were daily mispronounced by physicians whom he thought knew better.

Dr. C. A. L. Reed, of Cincinnati, read a paper on Hemorrhage at or Near the Menopause.

Dr. William H. Wathen, of Louisville, Ky.: Every woman who has a hemorrhage, at any stage of her existence, from the uterus that is irregular, that does not conform to the general rule of her life, whether it is a young girl not over twenty, or in a woman of sixty, ought to be examined; and if the profession would adopt this rule we would find that most of the cases of cancer would be diagnosticated sufficiently early to admit of treatment.

He thought the correct treatment in the early stages of the disease, before it had involved adjacent structures, is total extirpation after the fashion that the operator may adopt.

Dr. Wathen had, within the last two weeks, seen two cases in consultation, where he was
entirely undecided as to whether hysterectomy should be done or not. He could promise these women but little benefit. Where the disease was extensive, even after an operation had been done, it seemed to be universally the fact that the disease returned. He had seen a lady, a day or two ago, who had been operated upon by a prominent eastern specialist. The operation was well done, and every particle of diseased tissue was said to have been removed, but the woman had not long returned to her home before the disease recurred, and she rapidly went on to her grave. If the cases could be seen before the system is infected, before the involvement of any adnexa, before the disease had reached the vagina or extended through the thickness of the uterine walls, or any of the cancer cells deposited outside, and operated upon, the disease might never return. Adenoma was in itself a malignant disease; but it might go on for several years, with the woman having more or less trouble, and still there is no genuine cancer, so to speak—but when it does develop into cancer the woman usually dies.

Dr. L. H. Dunning, of Indianapolis, Ind., said that one of the most perplexing class of cases with which the practitioner had to deal were those women, of forty-five or fifty years of age, who consulted him with reference to a severe hemorrhage at the menopause—perplexing on account of difficulty of diagnosis, and perplexing on account of his inability to afford relief in a great many instances. We are unable to make a diagnosis to determine the cause of the hemorrhage. Cases like this present themselves: A woman says she has profuse hemorrhage, and that all remedies fail to give her relief. She is forty-five years of age, and has never been irregular in menstruation, perhaps. How shall she obtain relief? In the absence of a fibroid tumor or cancer he finds great satisfaction of late years in examining and treating these cases with the curette. Under such circumstances we found fungosities of the uterus. A case presented itself to him like this: About six months ago a woman came into his office, saying that she had menstruated continually for two years; that physicians had exhausted their resources and did not afford her any relief. No cancer; no fibroid. The cervix was dilated, and with a dull curette Dr. Dunning removed a large quantity of fungosities, which entirely relieved the patient. She has not menstruated since, and it is one year since the curettage was done. This one case might be taken as a type of many of the cases that present themselves to the practitioner.

Dr. George W. Burton, of Mitchell, Indiana, asked Dr. Reed how early in cases of cancer of the uterus a correct diagnosis be made with the aid of the microscope; and if made early, would he advise total extirpation of the uterus?

Dr. Joseph Mathews, of Louisville, Ky.: He would endeavor to answer the question of Dr. Burton as to whether it was possible to make an early diagnosis of cancer—he would not say of the uterus, rectum, breast, or anywhere else. Is it possible to do it? He might answer, yes, sometimes. Upon three different occasions, happening within five months, patients had consulted him, giving plain evidence clinically of cancer of the rectum. Feeling that he did not know cancer when he saw it, he submitted specimens to the best microscopists in Kentucky. In each case the gentlemen returned him a note, saying that the trouble was malignant. He then conveyed the sad intelligence to the nearest relative. Each one of the patients to-day was well.

While in New York, a few weeks ago, he picked up Harper's publication, and to his surprise saw an article on cancer from Drs. William T. Bull and Curtiss. He was surprised because the article was written for that periodical instead of for a medical journal. The next day he was invited by Dr. Wyeth to hear him read a paper before the New York State Medical Society. He went, and the gist of Dr. Wyeth's paper was that practitioners should write articles on cancer for these periodicals, the point being this, that if the female suffering from incipient cancer of the uterus could be forewarned at the time of the beginning of the tumor to consult her surgeon, the early removal of it would save her life. He believed this position was tenable. Do we ever see patients in this stage of the disease? He never had. He had been engaged in special surgery for fifteen
years; he had excised cancers of the rectum, and had seen many of them, but had never yet seen a single case at the time when excision would possibly do any good. He had seen surgeons excise cancerous growths from the uterus, rectum, and other portions of the body, but the statistics as far as recovery is concerned were a little doubtful at least.

Dr. Mathews was anxious to know if the essayist could tell cancer when he saw it, and how he could tell it? And when is, and when is not an operation justifiable? And then his statistics as to cures by the removal of the cancerous growth, and especially the length of time that had elapsed since he did the operation.

A Member: I would like to ask Dr. Reed as to the probability of cancer in a woman of thirty or thirty-five with leucorrhea and profuse hemorrhage.

Dr. C. A. L. Reed, in closing the discussion, said he simply desired first to express his gratification at the unexpectedly interesting discussion to which his brief contribution had given rise. It was extremely gratifying that a paper written merely for its suggestiveness should succeed in eliciting from able gentlemen their mature views.

He would like to say something relative to the position assumed by Dr. Wathen, but as that gentleman was not present, and being a little apprehensive that he may have misunderstood him, he preferred to pass his remarks with a few words. He felt sure, from his knowledge of Dr. Wathen's skill, judgment, and inborn gentleness, that, whatever he may have said, he did not intend to convey the impression that he would examine every girl afflicted with irregular menstruation. He believed his position was that cases of persistent hemorrhage, even in young girls, should be subjected to an examination; and between persistent hemorrhage and menstrual irregularities there was the widest possible difference. He believed that gynecologists who came daily in contact with disease involving the female generative apparatus, who had to contend with the inborn modesty and shrinking delicacy of womanhood and maidenhood, stood back till the last possible moment before enjoining submission to even a digital examination, particularly in young women. When he reflected upon his department (gynecology) of practice, he believed his confrères were actuated in this matter by that sense of delicacy which should control gentlemen; hence many a case which might have been remediable in the early stages became irretrievable.

As stated in his paper, he had not time to discuss the relative merits of the different operations for the relief of cancer. There were several operations, dividing themselves into two classes, viz., total extirpation, and partial extirpation of the womb. He had fortified himself upon a position, which he had assumed with extreme satisfaction to himself, for the purpose of giving his patients the benefit of an operation the dangers of which were less than those of the others. He advised total extirpation of the womb. In doing this operation he was enabled to go beyond the probability at least of the invaded area of tissue.

As to the probability of cancer in a woman about thirty with leucorrhea and profuse hemorrhage, upon these two symptoms alone he would be loth to give a diagnosis of cancerous disease. Cancer, however, occurred in all ages, but it occurred more frequently near the menopause. A patient having persistent leucorrhea and hemorrhage needs careful investigation.

In regard to Dr. Mathews' question, the speaker thought he knew cancer when he saw it, sometimes. Cancer could not be absolutely diagnosed at sight in the earlier stages, but it could be done with a reasonable degree of certainty that would enable the practitioner to give the patient the benefit of a doubt. Dr. Mathews' observation, that the successful treatment of cancer depends largely upon the location in which it is found, was a correct one. There was no place in which its treatment was so successful as in the uterus, when seen sufficiently early and operated upon promptly and properly. The presence of a little nodule did not mean cancer, nor an erosion of the cervix. A patient applying to the gynecologist for some such trouble should be kept under constant observation, say every other day, for at least six weeks, and the erosion, or whatever it may be, treated with the probability of its being benign in character. Then, if it does not subside, but
becomes progressive, spongy or fungous in character, with a gradual metamorphosis of the normal structures, the practitioner should pick out a small piece and submit it to a microscopist. This would doubtless furnish presumptive evidence, and putting that with the aberrant epithelial deposit in the interstices of the areolar tissues, or with an erratic deposit of cells of the epithelial type, the practitioner would then have reasonable ground for suspicion that his patient had cancer. The speaker tells his patients that they have cancer, and says so with deep chest-tones of conviction for them to take the alarm and act accordingly. It was time for action, and action should be inaugurated promptly. If it be not cancer, the operation would not be necessarily fatal. If it be cancer, procrastination on the part of the practitioner might prove fatal.

SECOND DAY—MORNING SESSION.

Dr. H. M. Lash, of Indianapolis, read a paper on Posterior Spinal Sclerosis. He said posterior spinal sclerosis is a systematic disease of the cord, the posterior white columns, those of Gall and Burdach, being the affected parts. The author's experience has been limited to three cases, all males in middle life, whose habits were active and exposed. One, a physician, who traveled nearly altogether on horseback over a large rural district in all kinds of weather. Another, a railway mail clerk, with a long, busy, hard run. The third was a locomotive engineer. Syphilis was suspected in one. This one has reached a fatal termination. The others are following the usual progressive history.

The methods of treatment have been numerous, and all attended by quite uniform results, viz., failure. But this should not deter us from further efforts. So far, it is put down among those diseases having a gloomy prognosis. For that reason investigators in this field are digging deeper for causes and for pathological facts, with the hope of bringing it within reach of remedial and curative agents. The present status is certainly more hopeful. This statement is based on the belief that the theory of hyper-nutrition as a cause is correct. That being accepted as true, the procedure in the first or forming stage is plain. Unload the overdistended tissues and keep back the excessive flow of blood to the parts. This may be accomplished, provided the condition is sufficiently early recognized, by the combined use of such internal agents and local and general applications as tend to contract the arterioles and deplete the parts by carrying the overaccumulation of blood to other and, as much as possible, distant localities. Administer ergot in liberal doses. Its effect will be materially aided by giving with it one of the bromides. Locally, apply to the spine cold water, or, what is more positive in its effects, ice, a bag of it along the portion implicated. Ranney recommends the use of hot water as a beverage, a gobletful an hour and a half before each meal. His object is to increase peristalsis, stimulate urinary secretion, produce warmth of the skin, and encourage perspiration. His idea of revulsion is a commendable one. But may it not be carried further with added advantage? Invite the circulation actively to the extremities and to the entire cuticle. This might be accomplished by a wholesale application of counter-irritants and frequent hot foot-baths. But, if the proper appliances are obtainable, it can be better done. Put the patient through such a course of general warm packing as will dilate the entire superficial capillary system, so arranged that it can be carried to any desired or required degree, and free perspiration produced. Maintain it for twenty to thirty minutes each day. Follow it by rest for several hours in a comfortably warmed bed with massage.

During the entire procedure, however, keep the ice-bag constantly applied to the spine. This will meet the objection to and failure of the hot bath alone. The amount of blood sent to the affected part will be thus diminished while it is increased in the general circulation.

The dorsal position should not be encouraged. Such patients ought to lie mostly on the side.

The stage of established sclerosis or marked ineo-ordination calls for a modification of the treatment. Bromides are no longer serviceable, and the same may be said of ergot. Iodide of potassium probably stands at the head of appropriate remedies, especially if
syphilis is suspected. By its use the disease may be kept, at least, in abeyance for many years. All complications, such as the severe pains, incontinence of urine, constipation, and the like, must be treated in an enlightened manner as a means of relief to the suffering patient. Belladonna or its alkaloid best controls bladder difficulties.

Dr. L. H. Dunning, of Indianapolis, Ind., read a paper on Recurrent Pelvic Inflammation, in which he summarized as follows:

1. Recurrent pelvic inflammation is a mixed disease, involving organs and tissues of widely different histological structure.

2. It usually begins in an endometritis, but in the end the fallopian tubes, ovaries, pelvic peritoneum, and sometimes the pelvic cellular tissue are all more or less affected by the morbid process.

3. An uncured acute inflammation of any one of the organs or structures named above predisposes the patient upon the operation of an exciting cause to a recurrent acute attack. Each acute attack still more predisposes to subsequent recurrences.

4. Suppuration in any of the structures involved may occur. It most frequently occurs in the fallopian tubes.

5. Prophylactic treatment is the rational one.

6. Pregnancy and delivery are fraught with danger in patients who have recurrent pelvic inflammation.

7. Electricity aids in the promotion of the absorption of the exuded lymph before it becomes thoroughly organized into tissue.

8. When suppuration occurs operative procedures are indicated. The method of evacuating the pus or removing the pus cavity must be determined upon investigating each individual case.

Afternoon Session.

Dr. Joseph Mathews, of Louisville, Ky., read a paper entitled Antiseptics in Rectal Surgery.

He said at one time he seriously doubted if the antiseptic treatment would obtain in rectal surgery as in other operations. Since he had fully tried the precautions and rules in this department of surgery, he was persuaded that with care and attention to details the same advantages could be obtained. Not only do we get quicker and better results by their use, but we also prevent septic infection, which sometimes forms wounds around the rectum. When we remember that it is not the size of the wound which controls the amount of sepsis, but the exposure to the cause, we can understand that the operation on a simple pile, whether by ligature, clamp, cautery, injection, or otherwise, may result in septicemia, tetanus, etc. When we remember, too, the large quantity of blood that goes to the rectum, and the close continuity of the glandular system, it is no wonder that a septic infection can and does take place from wounds inflicted in this locality. It is a fact worthy of note that persons suffering from a malignant affection of the rectum die often of rapid sepsis.

In the operating room Dr. Mathews uses the following articles: 2 earthen bowls, 2 earthen dishes, 1 irrigator, 1 bottle of Johnson & Johnson's bichloride-of-mercury tablets, 1 bottle of carbolic acid, 1 package of absorbent cotton, 1 rubber sheet, 1 bottle ligatures (silk), 1 bottle prepared cotton and gauze sponges, 1 small bottle iodoform, drainage-tubes, 1 razor, 1 nailbrush, bandages, bichloride gauze, iodiform gauze, 1 jug boiling distilled water, 1 wastewater bucket, 12 sublimated towels, 1 dozen safety pins, 1 teaspoon, 1 chloroform or ether cone, 1 can of vaseline, 1 hypodermic syringe, 1 bottle chloroform (Squibbs), 1 can of ether, sulphate-morphia tablets, brandy, nitrite amyl.

It may appear to some that this is a long list; and should there be those who would question the necessity of some of these articles, to such an one he would say that if any one article in the list is left out, the day might come to the doubting surgeon when he would wish that it or they had been included. When he looked back over his past surgical work, and remembered the death of a patient from tetanus resulting from the ligature of internal hemorrhoids, he wonders if he had remembered to have taken his little tablet of mercury, if the patient would have been living to-day.

Dr. George J. Cook, of Indianapolis, read a paper on Reflex Disturbances from Rectal Disease.
He said three factors were essential for a reflex act—an afferent nerve fiber, a transferring center, and an efferent nerve fiber, forming a reflex arc. A very common reflex from rectal disease is pain over the posterior surface of the sacrum and coccyx. When this reflex exists, if the disease is limited to the lower part of the rectum, the patient will complain of pain at the end of the coccyx; if the disease is in the central part of the rectum, the pain will be in the center or lower part of the sacrum; and when the disease is in the upper part of the rectum, the reflex will be in the upper part of the sacrum between the innominate arch. The location of the reflex will indicate the part of the rectum involved, demonstrating that the nerves to any part of the rectum and to the posterior surface of the vertebral column opposite this are given off from the same point in the spinal cord, bearing the same relation as the nerves to a muscle and the skin over it. The chief nerve supply is to the lower part of the rectum. The middle and upper parts possess comparatively little sensibility, yet in diseased conditions of them we see very severe and troublesome reflexes, causing the patient much more pain than the primary lesion. Disturbed heart action is a reflex which we see in connection with disease of the rectum, and especially with disease of the upper part. Irritation of the rectum will inhibit the action of the heart. This is demonstrated under anesthesia. When the patient is thoroughly under the influence of the anesthesia, and the sphincter muscles are stretched, it is not uncommon for the pulse to become quite weak for a time. It is surprising sometimes to see what extensive reflex disturbances will result from a comparatively slight primary lesion in the rectum, and again what extensive disease can exist, especially in the middle and upper parts of the rectum, without any manifestations reflex in character.

Dr. Wm. N. Wishard, of Indianapolis, read a paper on the Palliative and Operative Treatment of Enlarged Prostate, in which he said it is now well recognized that enlargement of the prostate produces appreciable symptoms only in a minority of cases. Also, that while the majority of patients who have prostatic enlargements are men well advanced in years, yet it is not necessarily a senile disease.

The radical treatment of enlarged prostate contemplates the removal of obstructing growths. The cases reported by the author illustrated some of the forms of prostatic enlargement. They were reported with the belief that bladder surgery, particularly in the past few years, establishes the following principles:

1. That a large per cent of cases of prostatic cystitis, which are not susceptible of relief by the well-known methods of palliative treatment, can be more or less permanently relieved by surgical interference.

2. That perineal and supra-pubic incision are the two methods best calculated to accomplish the result sought.

3. That neither one of these operations is suitable to all cases, and that both may sometimes be required.

4. That the object of a radical operation should be the removal of the mechanical obstruction to urination, and drainage and rest of the bladder.

Statistics thus far show that restoration of bladder function has followed in over two thirds of the reported cases of removal of mechanical obstructions caused by prostatic growths, and furnish occasion for careful study of all cases of prostatic enlargement accompanied by the usual symptoms, with a view to determining what cases are amenable to surgical relief, and what are the best means of solving the mechanical problems involved.

If it be possible to determine beforehand which operation, perineal or supra-pubic, will afford an opportunity to examine the inside of the bladder, we have gone far toward securing the data necessary to the selection of the form of operation best suited to individual cases. In determining beforehand we have no means of securing positive evidence, but there is already accumulated sufficient experience to afford valuable indications in the selection of the operation probably best suited to the individual cases:

(a) It appears in the very valuable collection of one hundred and thirty-three cases, by Belfield, of operations upon the enlarged pros-
tate, that the perineal operation is somewhat safer than the supra-pubic.

(b) Inability to reach and explore the bladder by a perineal opening is said to exist in about thirty per cent of all cases.

(c) Where it is possible to reach and explore the bladder by perineal incision, it is not generally possible to do so with the same thoroughness as by a supra-pubic incision.

(d) Where there is an elongated prostatic urethra, it is generally associated with a rectal tumor of large size, and the increased length of the prostatic urethra, and the consequent increased perineal distance, is approximately indicated by this fact and by measuring the distance with a catheter from the meatus to the point where urine is obtained. A large rectal tumor was accompanied by an elongated prostatic urethra in all of the author's cases.

LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, November 26, 1891, Dr. William Cheatham, President, in the chair.

Dr. A. M. Vance read the essay of the evening; subject, Three Fatal Cases. (See p. 1.)

DISCUSSION.

Dr. W. L. Rodman asked if the tumor of the shoulder (Case No. 1) pulsed. He had seen but two cases, and considered sarcoma a rare growth in this situation. His first case was in the person of a man twenty-two years of age; the second in that of a man aged between forty and fifty. In both the disease was rapid and fatal. Sarcoma is a disease of the first half of life. It comes more rarely in the bony than in the soft parts. A point of interest in the case is whether the tumor began centrally or peripherally. Rapid growths would indicate a central origin. The average age of persons with sarcoma is from twenty-six to twenty-eight years. Four out of five cases develop in persons under thirty. A case at fifty-eight years was the oldest the speaker had ever heard of. A diagnostic feature of the case was the absence of glandular involvement.

Dr. J. A. Larrabee asked if the rash which occurred in Case 3 a few days after the operation might not have been caused by iodoform. The speaker thought that in cases where iodoform is used lavishly poisoning sometimes occurs by way of the respiratory tract.

Dr. Yandell gave an account of a case of sarcoma of the shoulder in which the tumor was removed, and which after eight years' time had not returned.

Dr. Vance said that Case No. 3 was the first he had lost when operating for convenience. He is uncertain as to the cause of death in this case, hardly believing it due to the amount of surgery involved in the operation, while sepsis seems to be excluded by the manner in which the wound healed. The healing was by first intention, no pus appearing. The eruption resembled urticaria.

Dr. T. L. McDermott said that he had once seen with Dr. Rodman an eruption similar to that reported by Dr. Vance in a case of septicemia. In this case there was no itching.

Dr. T. H. Stucky exhibited the stomach of a man dead of carcinoma of that organ. The tumor and other symptoms were first noticed after the patient had fallen from a street car. A notable feature of the case was the absence of pain and the small amount of nausea and vomiting during the course of the disease.

Dr. William Bailey said that pain and vomiting are common in cases of pyloric disease, but not a necessary feature of the disease. The amount of obstruction and the character of food used are prominent factors in the production of pain.

Dr. F. C. Wilson reported a case of laryngeal diphtheria treated with bichloride of mercury in doses of one sixteenth of a grain and with peroxide of hydrogen by atomization.

Dr. J. M. Ray had seen recently five cases of laryngeal diphtheria in children. He had used in all a spray of glycerine and bichloride of mercury, and all had recovered.

Dr. Larrabee had seen several cases. It was a question in his mind as to whether the bichloride given internally acts as a germicide or in some unexplained manner combats the disease.

Dr. D. T. Smith maintained that when diphtheria was of a mild type almost any agent was curative, but that the severe and malignant
forms would successfully defy any treatment. He had but little faith in the marvelous performances of the bichloride. The drug had been long enough in use to have its efficacy established, and yet bad cases of diphtheria die today as frequently as they did before the bichloride was pitted against the disease.

Dr. Turner Anderson said that the tube, as introduced by Drs. Cheatham and Ray, had succeeded so well in his cases of laryngeal diphtheria that he had abandoned the spray in treating children with this disease. Most of his cases have recovered when intubated. The mortality by old methods of treatment was ninety-six per cent. Intubation has reduced this to sixty per cent or better. When the disease is in the pharynx he uses Dr. J. Lewis Smith’s prescription of sub-sulphate of iron, glycerine and carbolic acid locally, and gives chlorate of potassium internally in doses of three grains.

Dr. Cheatham had, in a large experience with intubation, had forty per cent of recoveries. He believed that the presence of the tube causes absorption of the membrane.

Dr. Ray had had nineteen cases, with seven recoveries.

J. S. BULLOCK, Secretary.

Reviews and Bibliography.


This visiting list is gotten up in convenient form, and contains all the ready references any well-informed physician could desire. It is mailed to physicians on receipt of price, 75 cents, thus making it the cheapest of the desirable visiting lists published.

TREATMENT OF DIPHTHERIA BY CYANIDE OF MERCURY.—M. de Ruelle has obtained good results from the use of cyanide internally, recommended by Werner and Læffler, and as follows:

Cyanide of mercury .................. gr. j.
Alcohol .................................. 3 li.
Water .................................. 5 vij. M.
A teaspoonful every hour.

Abstracts and Selections.

THE PREDOMIAL AND EARLY SYMPTOMS OF BRIGHT’S DISEASE.—In the Boston Medical and Surgical Journal for September 10, 1891, Dr. Charles F. Withington enumerates the following symptoms in the order of their priority, as determined through an analysis of seventy-five cases of chronic interstitial nephritis.

1. Polyuria, with frequent micturition, and especially increased nocturnal micturition, was experienced by twenty-five persons, or thirty-three cent per cent. One had it twenty years before death, and four for two years and over. Eight persons, giving data on this point, showed an average of three and three fourths years of polyuria before death. This average does not, as some others will be seen to do, require to be raised to represent the true figure.

2. Dyspnea was experienced by forty-seven, or sixty-four per cent, being the most frequent symptom. The longest case was forty years. The average of twenty-six persons, giving dates, was one hundred and eight weeks, or a little over two years. But this average requires to be materially raised, from the fact that it does not include four persons who had dyspnea for “years” and one who had it “always.” So that the true average date of dyspnea should be carried back nearer to that of polyuria.

3. Edema, observed in thirty-eight cases, or fifty-one per cent. (This will be remembered in comparison with the eighty-four per cent of edema in the mixed cases of chronic Bright’s.) The longest cases were fifteen and twelve years. The average of twenty-nine persons was sixty-nine weeks, which requires to be slightly raised on account of a thirtieth person who had it for “years.”

4. Cough occurred in forty-one persons, or fifty-six per cent. The longest ten years; two for five years. The average of thirty-two persons, forty-seven weeks, which is somewhat too low, as there were three others who had had it for “years.”

5 (or 6). Palpitation, nineteen persons, or twenty-five per cent. The average of nine persons had had it for twenty-six and a half weeks, which is a little too low, as it does not include one person who had had it for “years.”

6 (or 5). Headache, twenty persons, or twenty-seven per cent. Two had had it for “always” and one for “years,” which should materially raise the average of eleven others who had had it for twenty-one weeks.

The remaining symptoms average too near
each other and are based on too small a number of cases to warrant an opinion on their relative priority.

Nausea and vomiting present in thirty seven patients, or forty-nine per cent. One had had vomiting “always,” one for “years,” and twenty-four others averaged nine and a half weeks before death. This average is probably too low.

Amblyopia, in eleven persons, or fifteen per cent. One person had it seven years. Including him in six cases, giving dates, we should have an average of fifty-four weeks; omitting him, five cases give sixteen weeks, which is doubtless nearer right.

Vertigo, in thirteen, or seventeen per cent. The earliest twenty-two weeks; the average of five, nine weeks.

Diarrhea, in sixteen, or twenty-one per cent. One had it for ten years. The average of ten others, 6.2 weeks. (Per contra, three record constipation.)

Lumbar pain, in four persons, or five per cent; which shows the popular fallacy of back-ache as a symptom of Bright’s, at least in this form.

Cerebral hemorrhage occurred in ten persons, or thirteen per cent. The earliest was five years before death. Three had two attacks, and one had three. Six died from hemorrhage of brain or meningies.

Other hemorrhages occurred as follows: of the nose, seven; of the lungs, six; bowels, two; stomach, one.

Delirium occurred in fifteen, or twenty per cent. It was generally a late symptom, the earliest case being three months, and eleven cases appearing first within the last two weeks of life.

Disorders of sleep are thus classed: insomnia or vigil in eleven; drowsiness or sopor in four. Rather a late symptom.

Convulsions, of course, occur late. They are recorded in only seven, or nine per cent. Coma, prior to the day of dissolution, in twenty-six. Cyanosis is spoken of in eleven cases; in at least five it was noted ten days or more before death.

Of other symptoms, infrequent but of significance, the author mentions: itching in two persons; other paresthesia in three; thirst in four; neuralgia in two; sore-throat in two; Cheyne Stokes respiration in three.—Therapeutic Gazette.

THE THERAPEUTIC EFFECTS OF CANTHARIDIN.—At a recent meeting of the Medical Academy of Genoa, Devoto (Riforma Med., July 8, 1891) read a paper on the therapeutic action of cantharidin. Such effect as it had was due to the serum which under its influence was exuded from the vessels. He had made a series of researches on the effects of serum obtained by means of blistering fluids in various affections. The following is a summary of his results: (1) The exudation brought about by cantharidin is never equal to blood serum as regards the quantity of albuminoid material which it contains; (2) the amount of albuminoid material is in certain cases, notably in tuberculosis, extraordinarily low; and (3) chloride of sodium is present in these albuminoid substances in much smaller amount than in blood serum. At the same meeting Profes—or Maraglio said he had used cantharidin in four cases, but had been compelled to discontinue it, owing to the development of renal complications. Dr Cantu said he had employed it in two cases, but had abandoned its use on account of the “serious general and local phenomena” which it caused.

Dr. S. V. Persich, of Kazan, reports (Woch, No. 26, 1891, p. 627) two cases of pulmonary tuberculosis (man and woman), in which the cantharidin treatment seemed to have a marked aphrodisiac effect. In both cases the sexual excitement rapidly subided when the treatment was discontinued.—British Med. Journal.

THE NEW TREATMENT OF PNEUMONIA BY LARGE DOSES OF DIGITALIS.—We have certainly entered a new era in regard to the treatment of one of the most common and dangerous of affections, pneumonia. The routine practice of blood-letting and the administration of tartar emetic will now be laid aside, to be superseded by the employment of a drug that bids fair to become almost a specific in the disease under consideration.

Traube, Wunderlich, and others who first employed digitalis in large doses noticed good effects, and, following the teaching of these investigators, Petresco and more recently Huchard, Barlet, and Tiki have tried the drug with most gratifying results. Petresco, more extensively, perhaps, than other observers, has especially investigated the subject, and since he first began to employ the remedy he has entirely abandoned all other therapeutic measures. Before 1883 this author was a confirmed believer in the tartar-emetic and blood-letting treatment, but all this was immediately abandoned after he began to employ large doses of digitalis. Petre-co claims that the drug does good not only in infectious croupous pneumonia, but even in broncho- and pleuro-pneumonias. He asserts to have cut short the disease by this sole treatment in from twenty-four to forty-eight hours, during which time he has observed an abrupt fall of temperature from 106.5° F. (the highest seen) to 98°, 96.8°, and
even 95° F., together with a marked reduction of the pulse, which from as high as 140, and even higher, was brought down to 60, 40, 30, and in one remarkable instance to as low as 24. In the last case the patient fell into a quiet sleep, this being followed by a local and general improvement. The author has compared the results obtained under the action of digitalis with those observed in the treatment by other drugs, such as alcohol, bromide of potassium, caffeine, strophanthus, and also with those offered by the expectant and emetic methods, and finds that, taken all in all, digitalis is far inferior in every respect. His statistics are certainly very interesting, and fully sustain his assertions. Thus, in 825 cases treated by him since 1883 exclusively by large doses of the drug, he has only had a mortality of 2.06 per cent. Bennet, it will be remembered, obtained under the tonic treatment a mortality of 3 per cent in 129 cases, and a mortality of 6.08 per cent in 720 cases under the expectant treatment. In the experience of Edinbourg, in a record of 698 cases treated by venesection alone, the mortality was 34.05 per cent, which speaks for itself.

Petresco communicated the excellent results obtained by him under the new treatment to the Paris Academy of Medicine in 1888, to the Therapeutic Congress of 1889, and, lastly, to the recent International Medical Congress held at Berlin. Yet up to a comparatively short time Petresco had but few followers. In November, 1890, Huchardet and Bardet presented to the Société de Therapeutique the results obtained by Charlot in the clinical wards, and by Bardet in the laboratory from a series of experiments on animals. Both authors agreed that the doses of digitalis should be considerably larger than those generally employed. Petresco has been in the habit of using from 60 to 90 grains a day, in infusion, for three and four days consecutively. With these quantities the author has never noticed untoward effects, such as vomiting, diarrhea, disturbances of the pulse, and much less collapse.

The latest contribution to the subject is that of Tiki, of Vienna. His results have been most gratifying. This distinguished practitioner has made, up to the present time, 61 carefully studied observations, of which 47 were cases of fibrinous, and 14 of lobular pneumonia. All these cases were exclusively treated with large doses of digitalis. Only one death occurred out of this number, giving, therefore, a mortality of only 1.65 per cent, a gratifyingly low figure. In the whole series of these cases some disagreeable but not fatal symptoms were observed. In two there was a moderate collapse; in twelve, vomiting; in four, an intermittent pulse, and in a few, slight diarrhea. These effects, however, disappear on the suspension of the drug, after which the good results come on rapidly. Tiki prescribed, during twenty-four hours, 3 grams of the digitalis in 200 grams of water in the form of infusion. According to the author digitalis shortens the period of the disease and causes it to assume a benign character. From the second to the third, or, at least, the fifth day, the temperature begins to decline, and pari passu with this phenomenon there is a gradual decrease in the cardiac rate, together with a marked amelioration of the general condition of the patient.

These observations of Tiki coincide with those of Petresco, and it would seem as if in the use of digitalis, in the quantities indicated, we have a most valuable method for the successful treatment of pneumonia—a method, in fact, superior so far to all others.—Medical and Surgical Reporter.

Methylen Blue in Malaria.—As it has been shown that both in dried and fresh blood preparations the malaria plasmodia can be perfectly colored by methylene blue, and as in both warm and cold-blooded animals it colors the red blood corpuscles, Drs. Guttmann and Ehrlich hit upon the idea of trying it therapeutically in malaria. Their expectations have been realized, and the investigators have shown that methylene blue exerts a decided action on malarin poison. The febrile attacks ceased the first day of its use, and in eight days at the latest the plasmodia had disappeared from the blood.

The form of drug used was the chemically pure prepared by Meister, Eucius, and Brüning. It was given in doses of 0.1 gram in capsules five times a day in the fever free interval. In the first case it was given every three hours; in two cases of quotidian the five doses were given at hourly intervals. The remedy must be continued in daily doses of 0.5 gram for at least eight days after the cessation of the fever. No disagreeable by-effects were observed, except slight bladder irritation. The daily excretion of urine was also observed to be increased. The urine was colored intensely blue. The intestinal evacuations contained the methylene blue in a reduced form, but they became blue on exposure. It was not ascertained whether the drug would prevent relapses.—Ibid.

Bryonia Alba as a Remedy.—Dr. Huchard (Rivista Clinica e Therapeutica, 1891) calls attention to a very old remedy which has during our own time escaped attention, namely, bryonia. Bryonia is a member of the Cucurbitaceae. The part of the plant used is the root,
which may attain the size of a man's arm, or even the thigh. The root is fleshy and yellow in color, while its juice is acrid and bitter. In the spring it is full of a white, irritant, and drastic juice. Its active principle is called bryonine. This remedy is one of the most ancient of medicines. Dioscorides praises its purgative and diuretic properties. Boerhaave used the dried root in wine as a cathartic in the treatment of dropsy. Harmand du Montgarny (1783) called it "the true European ipecacuanha," and used it in dysenteric diseases. Bryonia is a hydroague purgative which causes profuse watery stools, similar to those of jalap or senna. Too strong doses cause poisoning and a choleraiform state. Huchard recommends the remedy as a purgative, 3 grams (15 grains) of the powder at a dose, this dose producing in a case of hypertrophic cirrhosis with constipation five liquid stools and slightly colicky pains. He also recommends it in whooping cough, febrile diseases, and inflammations of the respiratory tracts; in bronchitis, pleurisy, pneumonia, etc. Bouchet used the tincture in febrile diseases.

Dr. Louvet-Lamarre used bryonia in whooping cough, where it diminishes tracheobronchitis, but does not shorten the duration of the disease. The dose is 1 gram (15 grains) per day for a child of seven years. During the spasmodic stage Lamarre prescribed the tincture of arosena, 1 gram (15 drops) per day. Huchard uses a larger dose, 2 to 5 grams (30 gtt. to 1 1/2 f.3) of the tincture. The two remedies may be associated, 1 to 2 grams of bryonia tincture to 2 to 5 grams of arosena. The powder may be given 1/2 to 4 grams per day.—Cincinnati Lancet-Clinic.

OXYGEN AS A REMEDY IN CHLOROFORM NARCOSIS AND CHLORAL POISONING.—The therapeutic action of oxygen taken by inhalation has an imperfectly recognized position with the profession at large. The Medical Press and Circular for June 3d, speaking for the English medical faculty, states that the remedial employment of the gas has, in Great Britain, been almost discontinued, chiefly for the reason that until quite recently the difficulty of procuring a supply of the pure gas, and the delay, trouble, and expense attending its administration did much to prevent it occupying such a place in the therapeutics of the practitioner as its known physiological effects warrant." At the present time, however, the compressed gas in iron bottles can be obtained from the apothecaries in the English cities "with the same facility as any other drug." The writer regards with surprise the unaccountable fact that one of the most active of therapeutic agents has been so little used that it may be said to have no place in practical therapeutics. As a quick and efficient respiratory and cardiac stimulant it is deserving of more frequent employment in cases of asphyxia, whether resulting from poisonous gases or general anesthetics.

In the suffocation of angina pectoris, the writer says, the beneficial action of the gas has been abundantly proved, and among other cases occurring latterly was that of General Philip Sheridan, in which the treatment followed was like that of Dr. Robert Reid, of Dublin, who, in 1817, used and advocated the gas as a practical remedy for this affection. One of Dr. Reid's cases was that of a man aged sixty-four who had suffered greatly from angina, and who obtained an amount of relief from oxygen by inhalation that no other agency gave him. The effect of the gas is, however, generally temporary, but life may often be saved by a temporary tiding over of the suffocative attack. The writer quotes from a recent number of the Nineteenth Century a case of gas poisoning which was successfully treated by oxygen inhalation. A soldier was found apparently lifeless and pulseless in consequence of having been exposed for a considerable time to coal gas from a burst balloon. An officer of his command bethought himself of a bottle of compressed oxygen as a possible antidote. A tube having been attached to the bottle, its mouthpiece was conveyed to the man's mouth. The oxygen was liberated through the tube, and appeared to force its way into the man's lungs and to become an immediate stimulant to the respiratory organs. In from ten to fifteen seconds from the first outrush of the oxygen gas the man, who had just before presented the aspect of a livid corpse, became agitated with paroxysms of a violence so marked that it was deemed expedient to order four of his comrades to hold him quiet. A half hour later the man was calmly walking back to the barracks, all danger being at an end. The writer accepts both the authenticity and promptness of the recovery in this case as a lesson in the treatment of cases of poisoning with carbon gases, especially those of the methane series. He also commends it to the attention of all who are concerned in the administration of anesthetics, and remarks, "How much better a whiff of pure oxygen than artificial respiration in chloral poisoning and chloroform narcosis?"

So far as the writer's knowledge extends, there are only two publications in which any advocacy has been made of this plan of treatment, namely, the work of Mr. George Foy on Anesthetics and M. Demarquay's Pneumatology. The writer adds, "Hospitals are provided with electric batteries to resuscitate the asphyx-
iated and to stimulate the respiratory function, but a more useful and active remedy, oxygen, finds no place in the emergency apparatus of the operating theater. We hope, however, soon to be able to report that all our general hospitals are provided with a stock of oxygen gas and a suitable apparatus for its administration."

In a later number of the Press and Circular a retired army surgeon adds the suggestion, germane to the foregoing, that a supply of oxygen might with propriety be made a part of the medical supplies of military stations for emergencies by drug-poisoning necrosis and other forms of asphyxiation. Oxygen may be serviceable in the after-treatment of surgical cases. Dr. A. W. Catlin touches upon this subject in the Brooklyn Medical Journal for August, in an article entitled Oxygen as a Distinct Remedy for Disease and a Life-Saving Agent in Extreme Cases. He observes that after prolonged surgical operations, where the patient has been "thoroughly saturated with the anesthetic" and where, as a consequence, recovery is tardy and convalescence is unsatisfactory, oxygen may be administered and will be found to enhance the reparative functions of assimilation and to quicken local repair. Oxygen is a great burden lighter from the heart in most cases of dyspnea, and indirectly quiets nervous storms, so that sleep is seen not infrequently to follow in the train of an improved aeration of the blood by means of its inhalation.—New York Medical Journal.

Injections of Ammonio-Citrate of Iron in Chlorosis.—Dr. C. Bonigiovannini reports (Rifòna Med., July 9, 1891) the case of a girl, aged thirteen, who was successfully treated for chlorosis by Dr. L. Alvazzi, of Turin, with injections of ammonio-citrate of iron. For three months various preparations of iron had been given in considerable doses without benefit, and she had become so weak as to be unable to leave her bed. The red corpuscles, which were pale, averaged 4,600,000 per cubic millimeter, and there was slight leucocytosis. As the internal administration of iron had failed, it was determined to try injections of the ammonio-citrate according to the following formula: Ammonio-citrate of iron, 1.29 gram; distilled water and laurel water, of each 5 grams. The injections, which were given with an ordinary Pravaz's syringe, were begun on December 22, 1890, one dose of 2 centigrams of the salt being given once a day; the amount was gradually increased, till on December 30th it had reached 12 centigrams, still given in one injection. No ill effects being observed, on January 8, 1891, two injections of that strength were given each day, and on April 9th the patient was discharged cured. Two or three of the injections were given under the skin, but this having on each occasion caused severe pain, all the others were made into the substance of muscles (glutei, muscles on outer side of thigh and arm, pectorals, etc.). The injections were given with strict antiseptic precautions, and were always followed by somewhat vigorous and prolonged massage at the seat of injection. Pain seldom lasted long, and no abscesses or even swelling followed the injections, nor did the temperature rise. When discharged the red corpuscles had recovered their natural color and averaged 4,350,000 per cubic millimeter, and the proportion of white corpuscles was normal. The hemoglobin had risen from 35 to over 95, and the girl's weight had increased from 72 to 84 pounds. Her appearance and her general health had immensely improved.—British Medical Journal.

Case of Cancerous Degeneration Occurring in a Fibroma of the Mammary Gland, with Remarks.—Miss D., white, single, aged twenty-two; father living; mother died of cancer of the stomach. Has always been rather delicate and nervous, and has suffered at times from irritable bladder.

Two years ago an abscess formed, without assignable cause, in her left breast. This abscess broke, discharged about a teacupful of pus, healed rapidly, and gave no further trouble until about a year ago, when she began to have shooting pains in the breast. The breast began to enlarge, the pain increased, shooting down the left arm, and the arm became so weak as to be almost useless. She was a fine pianist, but was obliged to give up music on account of pain and paresis of the left arm. She is nervous, does not sleep well, has a poor appetite, and has lost flesh during the last two or three months. Present weight, 96 pounds. Former weight, 115 pounds. Examination showed her to be thin, with a greenish, yellow tint of skin and conjunctiva.

Right breast large and firm for her size and flesh. Left breast about a third larger, brawny and indurated. The induration extended a toward the axilla, and an inch below the gland in the axillary line.

A distinct, hard mass, fixed and immovable in the lower and outer part of the gland. Skin immovable over nearly the whole breast. Nipple very small, of a dark brownish, pink color, not retracted. Two enlarged glands in the axilla, one of them as large as a hickory nut.

Assisted by Drs. Sterling Ruffin and William F. R. Philips, I removed the entire breast, pectoral fascia and indurated tissue around the
gland, and the axillary glands. As I thought it necessary to remove all the skin that was not freely movable, there was some difficulty in bringing together the edges of the wound. This was accomplished, however, by using relaxation sutures, and the wound healed rapidly without the formation of a drop of pus, and without constitutional disturbance.

The patient has been very much relieved by the operation. She now suffers no pain, her appetite has returned, and she has gained six pounds, and has good use of the arm.

Examination of the breast, after removal, showed the entire gland to be infiltrated with a growth of connective or fibrous tissue, and studded with hard, fibrous masses from the size of a pin head to that of a walnut. There was no evidence of a capsule.

I removed several pieces of the breast for microscopic examination, and have the slides prepared by Dr. Scott, of Columbia Hospital, and myself, to show you to-night. Sections from a limited area in the central and softer part of the tumor are plainly seirrhous cancer. Sections from all other parts of the tumor show nothing but hyperplasia of the fibrous tissue, without any evidence of malignancy, and were at once pronounced simple fibroma.

I consider this a remarkable and interesting condition. Certainly malignant tumors usually present the microscopic characteristics of malignancy throughout the whole extent of the growth; if not at their inception, at least by the time that they have reached a sufficiently advanced stage to give clinical evidence of their nature.

I have never seen or heard of a cancer, which, when examined microscopically, did not show the typical alveolar structure, or other evidence of malignancy throughout its whole extent.

In this case, however, we have apparently, in the same tumor, two kinds of growth entirely distinct microscopically, and entirely distinct clinically. In other words, we have really two tumors, and we are forced to ask whether this is simply an accidental occurrence, or whether one growth stands in relation to the other as a cause or predisposing cause. It is not a new idea that cancer may attack some pre-existing benign tumor. Indeed, it is a well known and undisputed fact that cancer not infrequently begins in a wart or mole that had existed for a long time, perhaps from birth, as an insignificant and apparently harmless tumor, and many writers have made the statement that cancerous degeneration is more likely to occur in fibrous or myomatous tumors than in normal tissues. Indeed, it seems probable that cancer never begins in really normal tissues, but only in those where retrograde metamorphosis has begun either as an atrophy, after the active period of an organ has past, or as an infiltration with embryonic cells from prolonged irritation, injuries, scars, benign neoplasms, etc.

I know of no statistics or careful observations bearing upon this subject, nor have I ever heard of a case where microscopic examination has demonstrated the presence of cancer apparently developing in a benign tumor, but there is abundant evidence to show that, clinically, benign growths become clinically malignant.

In such cases it seems probable that the growth seems de novo malignant in the benign tumor, just as it might in an atrophic uterus. Such a condition would not usually be detected, at least until the malignant growth had penetrated, or even spread beyond the original benign tumor, and we do not know how often it may occur.

I have recently seen several tumors removed from the uterus that would, I think, have thrown some light upon this subject, had they been subjected to careful microscopic examination. One of these, for example, removed at Columbia Hospital, post-mortem, was, as far as could be judged by naked eye appearances, partly myomatous, partly malignant, and partly bone.

I do not wish to add to the numerous and groundless theories of the origin of cancer by pursuing this subject more in detail, but I think the most probable explanation of my own case is, that a growth of fibrous tissue was started by the abscess, and that the fibroma was attacked by cancerous degeneration about a year later, at the time when pain and enlargement of the gland began. The irritation of the cancer most likely caused at the same time a further growth of the fibrous tissue.

After reviewing the subject, I think we may draw the following practical conclusions:

1. It is possible, and even probable, that carcinoma frequently originates in benign tumors.

2. As such growth is extremely liable to be overlooked in its early stages, careful microscopic examination of various parts of apparently benign tumors should be made, particularly when they have been removed from the breast or uterus. Now that it is becoming the common practice to remove uterine myomata, as well as all growths from the mammary gland, the opportunities for such examinations are abundant.

3. The possibility of cancerous degeneration should afford a strong indication for the early removal of apparently benign tumors, particularly when such tumors occur in the mammary gland. — W. P. Carr, M. D., Va. Med. Mo.
Hour-Glass Contraction of the Stomach, with Large Ulcer.—Dr. R. Saundby (Birmingham Med. Review, October, 1891, p. 228) relates the following case: A woman, aged thirty-one, was admitted to hospital complaining of severe pain and tenderness in the stomach. On the day of her admission she twice vomited watery fluid matter, depositing a sediment like coffee grounds. Seven years before she had suffered from "ulcerated stomach," with coffee-grounds vomit. Again, four years ago, she was ill with the same complaint, but she did not remember any hematemesis. Her present illness dated from six months previous to her admission; it began with pain in the left hypochondrium, radiating round to the back, and vomiting, sometimes immediately, at other times two hours after food, but no hematemesis till four months from the beginning of the attack, when she vomited a quantity of blood and passed a lot by the bowel. She complained of great flatulence and acidity, and of frequent pain over the stomach, which was at once greatly increased by taking food, and was only relieved by vomiting, which occurred usually half an hour to an hour after a meal. The abdomen was retracted and soft, except just to the left of the epigastric region, where there was some resistance and pain on pressure. She was first treated with milk and lime-water, but as the sickness continued she was fed by nutrient enemata alone for a short time, after which the milk, etc., was resumed; but eighteen days after admission the vomiting and pain were very troublesome. The vomit was described as being like thick yeast, very foul-smelling, alkaline, and gave no evidence of containing free hydrochloric acid. The vomiting continued, and rather more than two months after admission she was suddenly seized with symptoms of perforation, intense pain in the abdomen, vomiting, and collapse, and died the same evening. At the necropsy general septic peritonitis was found. The stomach was hour-glass shaped, and bound down to the left lobe of the liver by old inflammatory adhesions. It was divided into two cavities by a narrowing situated about five inches from the pylorus, the opening between the two admitted one finger. There was no appearance of a cicatrix or thickening here, and the microscope showed no changes in the mucous or submucous coats around it. In the cardiac portion there was a large ulcer, about four inches long, situated along the greater curvature. This had exposed the pancreas, to which it was everywhere adherent, except at one point which had given way. The exposed pancreas was ragged and partly digested. The hour-glass contraction presented all the features of a congenital mal-

formation, that is to say, there were no indications of any inflammatory process to cause the constriction.—British Med. Journal.

Nitro-Glycerine for Neuralgia and Physical Depression.—Dr. John N. Upshur said that he had been sent for recently to see a woman, aged thirty-five, whom he found suffering from acute diarrhea, rapidly going on to dysentery, with a neuralgic headache, insomnia, irritable stomach, and great depression. The bowels were controlled by enemata. On account of the depression and irritability of stomach, the administration of such analgesic remedies as phenacetin, antipyrin, etc., was not considered advisable; so he determined to employ and observe the effects of nitro-glycerine. One one-hundredth of a grain was given. In three minutes its effect, as manifested by increased tension of pulse, could be positively identified. In two minutes more she expressed herself as greatly relieved, and experienced a desire to sleep. By ten minutes past twelve (twelve minutes since the administration of the remedy) the patient was comfortable, and the doctor left, leaving an additional dose with the husband with instructions to administer if there should be a return of the depression or headache. When seen in the evening there had been no recurrence of these distressing symptoms, and consequently no occasion for a repetition of the dose.—Virg. Med. Monthly.

Atropine in Heart Diseases.—Dr. Cardarelli (Norske Magasin for Laegevinderskaben, No. 4, 1891) has found that atropine in doses of $\frac{1}{2}$ to 2 milligrams ($\frac{1}{2}$ to $\frac{1}{2}$ of a grain) injected subcutaneously removes the inhibitory influence of the pneumogastric. The pulse increases in frequency, and the blood pressure diminishes. Hence, atropine is indicated in irritation of the pneumogastric. Whenever a slow pulse, with dizziness, convulsions, and syncope, are present, atropine is indicated.

Diphtheria.—Gaucher treats this disease as follows: The membranes are detached as far as possible with a piece of wood wound with cotton. The following is then applied to the raw surfaces two or three times:

- Camphor..........................20 parts;
- Olei ricini..........................15 parts;
- Alcohol absol..........................10 parts;
- Acidii carbolicii......................5 parts;
- Acidii tartarici......................1 part. M.

This acts as a caustic. The throat should then be frequently irrigated with a one-per-cent carbolic solution if possible, otherwise with hot water or a weaker solution. This series is repeated every few hours.
1812. ROBERT CARSON HEWETT. 1891.

On the morning of December 22, 1891, the oldest and one of the ablest and most beloved physicians of Louisville passed away. His death was due to la grippe, followed by pneumonia. For nearly half a century Dr. Hewett has gone in and out among us, and it may be truthfully said that no man in medicine has won more completely or held more deservedly the esteem, respect, and admiration of his professional brethren and his fellow citizens.

Dr. Hewett was born in New York City, October 9, 1812. His family shortly after his birth came to Lexington, Ky. Here he was educated, and here he began life as a civil engineer. In 1835 he began the study of medicine in the office of his brother-in-law, Dr. T. S. Bell. He graduated from the Transylvania University in 1844, came to Louisville and entered upon a practice which continued to grow until the day of his death.

He was the last of those eminent men who, in the middle fifty years of this century, made Louisville renowned as the medical center of the South.

The physicians of the city, in a meeting called for the purpose on the 23d ult., by a committee, drew appropriate preamble and resolutions regarding their dead confrère. We glean from their report such paragraphs as characterize Dr. Hewett as a physician and a man.

"For almost a half century Dr. R. C. Hewett had been toiling in our midst, and the lapse of time had but served to endear him in the hearts of this community, in which his presence was ever a blessing, and from which the memory of his well-spent life can never be effaced. Methodic and abstemious in his habits, careful of his health, which was perfect up to the very moment of his last illness, rarely losing a day from his professional labors, Dr. Hewett's career was a long and useful one. Devoted as he was to the practice of his profession, it did not entirely absorb his attention, for no one was more keenly alive to popular interests than he, and few more public spirited.

"He thought it better to wear out than to rust out. On the morning of his last illness he was busy on his daily rounds, so that when death came it found him in the harness.

"Dr. Hewett was a remarkable man. He may be said to have never grown old. Though his age was that of the Psalmist's limit, he was erect and firm in his carriage, without a wrinkle, cheery and boyish in disposition, with no suggestion or appearance of senility. He was neat in apparel, exact in judgment, and tenacious in memory, with a face and form typical of manly beauty.

"Those who have seen can not forget his superb presence in the sick-room, his far-searching inquiries, his painstaking investigations, his gentle manipulations, his assuring words of comfort when he felt that he could give them, and his tenderness for the sorrowing ones when all hope was gone. In kindness to his professional brethren he was never found wanting. When we called Dr. Hewett in consultation we knew that we would get the benefit of sound judgment, backed by ripe experience. His was an analytical mind. He was a close reasoner. He was no theorist, and never jumped at conclusions. He was a firm believer in the vis medicatrix. A favorite expression of his was, that it was unwise when a man was sick to make him sicker by disturbing medication.

"While he kept himself au courant with the vanguard, and was a close student up to the end of his life, he never allowed himself to be
carried away by the host of new remedies which in these days are crowding upon us. Out of the tares he thought an occasional grain of wheat might be found, but he was a firm believer in nature and her efforts. He was a close observer of the natural history of disease, and was ever on the side of rational expectancy. He was the safest of advisers, inasmuch as he never made or adopted a suggestion without seeing clearly the reason for it. In Dr. Hewett's hands our interests were safe. In the technique and etiquette of a consultation he was scrupulously careful. Strict honor was his watchword in his intercourse with his fellow doctors, as it was in all the affairs of his life. From pretense of all kinds, in and out of the profession, he shrank with a feeling akin to horror. He believed in achieving success simply and solely upon merit. With him an honest doctor must be an honest man. A charlatan could not be a gentleman.

"No words of ours can add to the luster of Dr. Hewett's name. He has been among us, tried, true, and trusted, since almost the dawn of the century. It is a sad reflection that in the death of our dear old friend the last link is broken that binds us to the memories of the past, for one must remember that he was the confrère and companion of others, now passed away, who once held firm sway in the hearts of this community. In the mention of Dr. Hewett's name we call up those of Knight, Ewing, Powell, the elder Yandell, Miller, Rogers, and Bell, surely a good company in the realms beyond. Full of years and full of honors, he fell almost at the post of duty. He bore his illness patiently and met death calmly and bravely. He was well aware of his approaching end, and remarked upon it that at his time of life his case was a hopeless one.

"Dr. Hewett was not only revered and admired by the medical profession of Louisville, but almost adored. Because of his rare attributes as a physician and his endowments of head and heart, he had for many years past become a necessity to his confrères. What we will do without him, now his final summons has come, is an unanswerable question in the minds of us all. We stand appalled in the presence of no ordinary disaster; therefore, be it

"Resolved, That in the death of Dr. Hewett the medical profession has sustained an irreparable loss, since it is bereft of its most highly honored member and one who was deservedly its leader.

"Resolved, That in his death the city has lost one of its most esteemed and progressive citizens and the community a physician worthy of the highest confidence.

"Resolved, That the medical profession of Louisville attend his funeral in a body, and that a copy of these proceedings be furnished the family of the deceased and the papers for publication."

Notes and Queries.

MEDICAL AND SURGICAL SOCIETY OF BALTIMORE.—(Stated Meeting, held Thursday, October 8, 1891.) The seven hundred and twenty ninth regular meeting of the Society was called to order with Dr. R. W. Mansfield in the chair. The minutes of the previous meeting were read and approved.

The following gentlemen were elected to membership: Dr. C. H. Wood, Dr. W. B. Burch, and Dr. J. Percy Wade.

Dr. Herbert Harlan read a paper entitled Some Cases of Obstinate Tinnitus Aurium Treated by Paracentesis.

Discussion. Dr. A. D. Mansfield: I have treated two cases by paracentesis. One was partially benefited and the other was relieved of the tinnitus. I find tinnitus quite a bugbear to treat; but I think I can get relief in some cases by strychnia in \( \frac{1}{16} \) to \( \frac{1}{32} \) grain doses three times daily.

Dr. Harlan: I did not mention any remedies in my paper, as I was discussing paracentesis only, but as Dr. Mansfield has mentioned strychnia, I recall a case that was relieved by five grain doses of quinine four times daily. She gets entire relief by taking two grains of quinine, three times daily, whenever the tinnitus returns.

Dr. F. C. Bressler read a paper entitled Report of a Case of Chronic Suppurative Osteomyelitis of the Femur, with Amputation.

Discussion. Dr. R. G. Davis: These causes are often the result of small injuries, and if not treated right in the beginning, they may cause an endless amount of trouble. I saw a case at the City Hospital some time ago, a man sixty years old, who had been seen by Pancoast, of Philadelphia, who had refused to operate on
him. Dr. Chambers operated by cutting down and scraping the bone. When the patient was carried from the table he was in a very bad condition. He recovered, however, without any trouble at all, which shows that even where cases appear hopeless, they may recover if operated on.

Dr. A. D. Mansfield read a paper entitled The Present Status of the Hydrochlorate of Cocaine as a Local Anesthetic.

Discussion. Dr. E. W. Willis: I indorse all that Dr. Mansfield has said of cocaine in eye surgery, but I do not think its greatest field of usefulness is there. In an experience of a year and a half in minor surgery, in the out-patient department at the Johns Hopkins Hospital, I think I find cocaine quite as efficacious as it is in eye surgery. We see from four to eight cases a day, and in 50 per cent of the cases it proved efficacious. We use one- or two-per-cent solution. In using a solution as weak as this, we do not find it necessary to take the precaution against its absorption by ligating the parts. In incising the edges of chronic ulcers we use a ten-per-cent solution on cotton, allowing it to remain on ten or fifteen minutes, and we find anesthesia is efficacious in far more than 50 per cent of these cases. I repeat, that I think the use of cocaine is quite as efficacious in minor surgery as it is in eye surgery, and it is certainly capable of a wider and more general application, as we all do more or less minor surgery, while only a comparatively few of us do eye surgery.

Dr. S. T. Earle: I indorse what Dr. Willis has said, but I wish to state that cocaine can be used in more important operations. I use it in all rectal operations. In simple fissure, in fistula, and in clamp operation for hemorrhoids. I use a stronger solution than is used at the Hopkins Hospital. I use one grain to fifteen minims, and try to use less than two grains in any one operation. I have not had any bad effects of late, as the solutions are weaker than I used formerly. I inject each hemorrhoid just before operating on it. By this method the operation is prolonged a little, but it reduces the liability to absorption.

Dr. W. H. Norris: I have used a two-per-cent solution on the urethra in passing the catheter and have found it to work very satisfactorily. I use it in extracting teeth at the dispensary with equally good results. I have heard a good deal said about its toxic effects, but have not had any such experience myself.

J. WM. FUNK, M. D.,
Secretary.

Medical College Convention.—Pursuant to call issued by the Cincinnati College of Medicine and Surgery for a delegate convention of the medical colleges of the State of Ohio, to be held at Columbus, on December 3, 1891, representatives of the following faculties were present: Starling Medical College, Toledo Medical College, Pulte Medical College, Columbus Medical College, Medical Department of the National Normal University, College of Physicians and Surgeons of Columbus, Woman's Medical College of Cincinnati, and the Cincinnati College of Medicine and Surgery.

On motion, Dr. Starling Loving was elected chairman, and Dr. Charles A. L. Reed, secretary.

On motion of Dr. C. E. Walton, representatives of the Physio-Medical Society of Ohio were admitted to a vote in the convention.

Dr. Charles A. L. Reed presented the following:

Resolved, By the Medical Colleges of Ohio, in convention assembled, that the legislature be and is hereby requested to enact a law which shall embody the following features, viz.: 1. The creation of a board or boards of medical examiners, in the composition of which equitable and just representation shall be accorded to the various recognized denominations of medical practice.
2. The examination of all candidates for the practice of medicine, holding diplomas hereafter issued by medical colleges which shall be deemed in good standing, by the board.
3. Exemptions from examination to extend only to those who at the time of the enactment of this law shall be recognized as legal practitioners within the meaning of existing statutes, but all legal practitioners shall be required to register.
4. A penal clause which shall secure the enforcement of the foregoing provisions.

Dr. C. E. Walton, on behalf of the Legislative Committee of Cincinnati, presented the registration law approved and promulgated by that committee.

On motion by Dr. Shockey, the resolutions presented by Dr. Reed were approved.

On motion by Dr. Kinsman, the secretary was directed to forward transcripts of these
proceedings to each local medical society in Ohio, and to the medical press.

On motion by Dr. Scoville, a committee was appointed to confer with the Legislative Committee of Cincinnati for the purpose of securing such changes in the bill proposed by that committee, as to make it conform to the resolutions adopted by this convention.

The chair appointed as such committee:

Drs. S. S. Scoville, T. C. Hoover, G. W. Mayhugh, and Charles A. L. Reed.

CHARLES A. L. REED,
COLUMBUS, O., December 3, 1890.
Secretary.

KENTUCKY STATE BOARD OF HEALTH.—A copy of the following commission is sent to health officials in each county: I inclose here with your commission as a member of the Board of Health of your county for the next two years. In addition to the duties imposed upon the local boards of health under the laws looking to the prevention or restriction of preventable diseases, it seems desirable to call special attention to Section 2 of the amended Act of 1890, designed "to protect citizens of the Commonwealth from empiricism," which reads as follows: "Nothing in this act, or the acts to which this is an amendment, shall be so construed as to authorize any traveling empiric to register or practice medicine in any county in this State; to open an office for such purpose, or to announce to the public in any other way his readiness to practice medicine in any of its branches in any county, shall be to engage in the practice of medicine within the meaning of the law."

This broad provision was evidently intended by the legislature to protect our people from the dishonest practices of the entire class of traveling doctors, and it includes those holding indorsed diplomas equally with those practicing without compliance with the forms of law. Every essential point involved in this legislation has been affirmed by the highest courts in other States; and in the trial of a case, recently, one of our circuit judges instructed the jury that even a physician properly registered and of previous good standing lost all the privileges secured by his registration when he became an advertising and traveling quack.

It is hardly necessary to enumerate the evils resulting from the false and dishonest pretenses and practices of these empirics. It is enough to say that their victims usually come from that portion of the community least able to bear or to protect themselves from the wrongs to which they are subjected, as is true of most of the evils against which sanitarians contend.

In view of these facts, it is suggested that each violation of this statute in your county be brought to the attention of the ensuing grand jury, after consultation with your county or district attorney, to the end that the people may secure the protection provided by this wise and salutary law. In addition, where one of these men has registered and left the county, it would be well to ask the county clerk to cancel the registration by noting the fact of removal, as provided in Section 1 of the Act of 1888, and then send him an official notice of such cancellation, and of the intention of your board to contest his right, under the law, to practice in your county.

The profession in Louisville is preparing for an organized fight for the rigid enforcement of the law, and it is believed that similar movement in every county in the State would soon rid us of the entire brood.

J. N. MCCORMACK, M. D.,
Secretary.

INFLUENZA.—A noteworthy difference between the present outbreak of influenza and those experienced last spring and the original epidemic of the winter of 1889-90 is the comparative slowness of its diffusion over the country. It is mainly confined to two widely separated parts of the kingdom, viz., Cornwall and the eastern counties of Scotland. The reports from the latter show that some towns and villages in Forfarshire, Perthshire, Fifeshire, and Kincardineshire have suffered severely. In Dundee the epidemic is on the decline, as also at Arbroath, where it has been particularly severe. At Lochee it is reckoned that more than 1,600 cases have occurred during the past month, and twelve deaths are attributed to it. It has been very prevalent at Edinburgh, but it seems only to have appeared at Aberdeen quite recently. It is remarkable that children
are being attacked almost as much as adults. Abroad, it is reported to be very prevalent in St. Petersburg and Berlin, while at Hamburg last week it had reached "alarming proportions," and the weekly mortality of the city and its suburbs exceeded the average by 280. In France it is especially prevalent at Bordeaux, where many deaths among the aged have occurred. It has also, as will be seen from our correspondent's letter, appeared in Paris.—London Lancet.

AMERICANS IN THE RIVIERA.—The British Medical Journal of December 5, 1891, says Dr. Wendt has been commissioned to visit the Riviera and the health resorts of the south of France in order to study and report on the healthy conditions and the sanitary (or insanitary) arrangements, municipal and domestic, of the towns and hotels at such places as Cannes, Nice, Pau, Hyères, Mentone, Monaco, San Remo, Alassio, Bordighera, Florence, and Naples. He will find much to exercise his industry and acumen, much to blame, something to encourage, and many causes for warning to his countrymen. American visitors to the Continent are particularly liable to typhoid, of which the frequently recurring and sad examples are probably the main cause of this journalistic tour of inspection. Part of this special liability probably arises from their habit of drinking iced water. So long as, following the advice of Dr. Herman Weber, they confine themselves to natural mineral waters of recognized purity they are safe. But these are not always at hand, and all do not yet understand that icing or aerating polluted water detracts nothing from its risks, and that even ice itself made from impure water is a source of danger. Where only local "drinking-water" is to be had in the Riviera, or anywhere on the Continent of Europe, it should always be first boiled and then filtered, as Dr. Gowers advises.

THE DEATH OF THE EARL OF LYTTON.—We learned with regret of the death of Lord Lytton, the British Ambassador in Paris, on the 24th ult., either from failure of the heart's action or from embolism. We are in a position to state that he had been in an indifferent condition of health for some considerable time past, and for nearly a year suffered from vesical irritation. During a recent visit to England he caught a chill, which precipitated an acute attack of cystitis, with retention. This latter was relieved by Mr. Thomas Smith, who saw the patient in conjunction with Dr. Norman Moore. On his arrival in Paris he was seen by Dr. Prendergast, who has since been in constant attendance, and who found the vesical inflammation had developed a most acute form, accompanied by much suffering, prostration, and febrile disturbance, with an abundant discharge of purulent matter from the bladder. His Excellency was subsequently seen on several occasions by Professor Guyon, in consultation with Dr. Prendergast. As the result of treatment the distressing symptoms had greatly ameliorated, the fever had subsided, and the patient's appetite and strength were all along well maintained, and his condition generally much improved, so much so that convalescence may be said to have been reached. It may be stated that no valvular or organic lesion of the heart had been noticed. The mind was clear throughout, and his Excellency had but a few hours earlier spoken most cheerfully and gratefully to Dr. Prendergast of his progress, and it may be added that up to a few moments before the fatal crisis "Owen Meredith" was engaged composing some lines of what must now be his last poem.—London Lancet.

TUMOR OF THE BRAIN.—At a recent meeting of the Société Anatomique, M. Martin Durr related the history of a man who had gone the rounds of various hospitals, suffering from successive attacks of paralysis, and who finally became affected with right hemiplegia, with head retraction and almost complete blindness. At the last he remained 185 days in a condition of almost complete coma, treatment being tried without success. At the necropsy the cortex was found to be healthy, but a tumor was present on the left side, affecting chiefly the optic thalamus and the posterior part of the centrum ovale. The surprising thing about the case is the length of time during which the patient remained in an unconscious condition. Ibid.
THE GOOD OLD REMEDY.

[Pharmaceutical Era.]

When every thing goes wrong, boys,
When you’re sick or tired,
When you visit your best girl,
And by her pa get fired,
There’s nothing in the world, boys,
Will bring you such relief
As a real good hearty laugh, boys,
’Twill soon allay your grief.
So for each pain, whatever the cause,
Just try the laughing plan.
Laughter’s an institution, boys—
Then let’s laugh all we can.

Let preachers rate frivolity,
We very well do know
The greatest prosers use it,
But oppose it just for show;
They find it such a help, boys,
As all poor sinners do,
And they need its consolation, boys,
As much as I or you.
Of all the remedies on earth,
Within the reach of man,
Laughter’s the best and cheapest, boys—
Then let’s laugh all we can.

FRENCH LAWS REGARDING PROFESSIONAL SECRECY.—In France the laws regarding the abuse of professional secrecy, the secrets between a physician and his patient, the pharmacist and the physician or the patient, are very severe, and enforced with great vigor and impartiality. The prefect of police is the officer who usually is the complainant in criminal proceedings against violators of these laws. A great commotion has recently been caused at Lyons by the discovery of the fact that the prefect of police had been the direct cause of what might be called a wholesale violation of the statutes. It appears that this officer had recently sold a lot of old paper, among which was a bundle of physicians’ reports relative to deaths occurring in the city for twenty years past. These reports gave the names, residences, etc., of the deceased, the nature of the maladies, and other information forbidden to be made public. The papers had been sold by the purchaser to grocers, spicers, and other retailers, as wrapping paper, and were thus as widely distributed as possible in the community. Upon bringing the matter to the notice of the officials, the latter could only offer excuses and promise not to let such an accident happen again.—Medical and Surgical Reporter.

SPECIAL NOTICES.

We call the attention of our readers to Messrs. John Wyeth & Brother’s new advertisement, which appears in this number, relating to their Compressed Tablets of new remedies (Antipyretics) for Influenza, Neuralgia, Headache, etc., and their great convenience for administration.

Dr. M. Chapier, Grenoble, France, says: “I have never known a soporific so efficacious as Bromidia, except morphine, and morphine is not so agreeable, and has inconveniences which I have not discovered in Bromidia. I have used this latter preparation frequently, and it has never failed in producing the desired effect.”

In prescribing the products of Manufacturing Pharmacists we should be guided to a great extent by the business standing of the manufacturers. No other house in the South or West has a better reputation for strict integrity than the firm of Robinson & Pettet Co., Louisville, Ky. We do not hesitate to recommend the preparations advertised by them on page — of this issue.

PHENACETIN-BAYER. In these days, when influenza in its protean forms is likely to come suddenly upon us at any moment, it is well to remember the splendid services of this medicament in the condition cited. Combined with Salol, it holds the first place in the list of remedies for the dreaded “grippe,” soothing the nervous condition, lowering the temperature, and dispersing the pain. Phenacetin-Bayer should be tried in all acute febrile conditions. Its action is so prompt, safe, and effective, and the relief it determines is so well marked and continuous, that it is daily growing in popularity with the practitioner. In all rheumatic and rheumatoid conditions Phenacetin-Bayer is also a most valuable remedy, while in the neuralgias and migraine it is without doubt our best analgesic.

One of the most valuable acquisitions to medical literature of the year will undoubtedly be the new edition of Prof. Roberts Bartholow’s “Hypodermic Medication,” about to be issued from the press of J. B. Lippincott Company. The rapid progress made in therapeutic science since the last edition appeared has demanded a thorough revision, in the execution of which Dr. Bartholow has largely rewritten the work, describing the various new remedies and giving the latest results of this method of medication. These changes have increased the work by about two hundred pages, and their importance and value will secure even a higher standing for the work as an authority on this branch of medicine. It will be found indispensable to every physician who would keep abreast with medical progress and discovery.
Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plenteat possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—Ruskin.

Original Articles.

SELECTION OF INTERESTING EYE CASES.*

BY J. G. CARPENTER, M. D.

Specialism in the larger cities has been in existence many years, and will continue while time lasts. The time has come for specialism or especialism in small cities and large country towns. In towns of two thousand or more population, in a rich and thickly settled country, practice in the general fields of medicine and surgery should be subdivided. No man has the time or strength and endurance, be he ever so competent, to do the run of both general and specialty practice. Consequently the field needs dividing. In county seats of two or more thousand inhabitants, with a thickly settled county, financially strong, and with numerous towns of five hundred to one thousand in the district, aggregating fifteen hundred to twenty-five thousand population, one or two physicians could devote their time to obstetrics and diseases of children and general practice or minor gynecology; another attend to general surgery and practice, or genito-urinary and rectal diseases, diseases of the skin, or gynecology; another treat diseases of the eye, nose, throat, ear, or be an especialist in the latter diseases; and diseases of the genito-urinary and rectal organs, abdominal and pelvic surgery, and have these subdivisions understood among themselves and by the laity. While this plan will not work in counties, yet there are many districts where it would work harmoniously and with satisfaction. Take any special county seat population of two, four, or six thousand, county thirteen or twenty thousand, with the four or five adjoining counties of ten or fifteen thousand each, and there is a population of fifty or seventy-five thousand for the especialist to draw from. If the essentials exist—that is, competent men, skilled and thoroughly equipped to practice the specialty branches—the people would prefer to have specialty work done at or near home than go one hundred or three hundred miles to have it done, incurring far greater traveling expenses, hotel bills, and much larger fees charged by the city physician, besides the loss of time from business, the displeasure of being away from home and among strangers, and the far greater risk of accidents and wrecks on the railroads, would indicate that specialism or especialism will grow and thrive in the small cities and large country towns with rich and thickly settled counties or districts. There would be less rivalry and jealousy and a better feeling, more courtesy and generosity, and higher esteem for confrères; consultations would be more frequently exchanged, and the almighty dollar would drop into the coffers ten or an hundred fold more than at present, while peace and good-will would always exist. Professional life would then be a joy forever, and worth living. Year by year the profession has been subdividing into smaller fields. The greater the population in any district, the more does this subdivision exist. The result is, there are more competent and skilled men, and the standard of education is higher. More education, accomplishments, skill, experience, and energy is demanded of the profession of the present day than was of our professional forefathers in the past.

*Read before the Central Kentucky Medical Society, October 22, 1891.
Stanford has for many years been a center for specialty and especially work to both the adjacent and remote counties. The major operations of surgery—stone of the bladder; trephining for brain tumors, depressed bone, and epilepsy; exsection of bone for necrosis; abdominal sections; internal and external urethotomy; the various operations for fistula and hemorrhoids; the ligation of arteries and removal of large tumors; tracheotomy and intubation; the many operations for removal of foreign bodies, growths, deformities, and occlusions of the upper air-passages and ear; in diseases of the eye, the operations for ectropion and entropion and trichiasis; pterygium, strabismus; tumors, including abscission and enucleation, iridectomies, and paracentesis cornea for hypopion; ulcers of cornea and hernia iridis. Errors of refraction, including compound and mixed astigmatism, have been corrected with proper glasses, with entire satisfaction to both patients and physician. The various surgical operations have not only been successfully done, but with marked skill and ability. Results have been obtained that any city specialist would be proud to record to his credit.

This is an age of electricity. We see, think, hear, feel by, and stand and ride on electricity, do the work of an amanuensis, also speak and make music by electricity. First-class medical schools, by requiring three courses of lectures seven to nine months each, with four years to study, have been and are electrified; the people are electrified, and the demand is for purer, better education, more competent and skillful professional men. The time is quickly coming when "second-class medical schools" and their "offspring" will be no more, because there will be no demand for them.

Case 1. C. W., female, aged thirty years; general health good; has had granular lids of right eye, anterior staphyloma for many years. The latter amounts to an exophthalmos; from repeated attacks of keratitis the cornea has become quite opaque; indeed it was a large leukoma. There was constant pain from pressure of the trachomatous lids, increased by muscular action of the globe. There was most intense neuralgia of the supra-orbital nerve. The irritation was transmitted to the left eye, causing both sympathetic irritation and ophthalmia. The left eye was photophobic, lachrymation profuse, ciliary neuralgia intense, attended with heat, weakness, and impaired sight. Enucleation of right eye was advised as an immediate prophylactic measure to left eye, and for its cosmetic and tranquilizing influence upon the mind. Patient will not consent to operation. Two weeks more elapse. Blindness of left eye supervened. Now an operation of abscission is agreed to and performed, with salutary effect for left eye. The sympathetic ophthalmia rapidly abates, sight is restored, and recovery is complete in three weeks. The lens was chalky, dislocated forward, the iris and cornea adherent at points, and showed evidences of irido-choroiditis.

Case 2. E., aged ten years, fair health, has trachoma one year's duration, contracted from uncle by using the same towel. The usual remedies for such cases were used for six months, with considerable improvement. Jequirity in powder was dusted on the everted lids in limited quantity. A mild purulent ophthalmia resulted, lasted about a week, and was treated by thorough antiseptics and asepsis. This was followed by a lotion of sulphate of zinc, grs. ij, powdered alum, grs. iiij, aqua. 5 j, three drops into each eye three times a day for three or four weeks, and ung. hydrarg. oxid. flav., grs. iiij to simple cerate 5 j; a piece the size of a pea placed in each eye at night, and massage used freely to the lids. Recovery complete.

Case 3. B. D., aged thirty years, male, good health, the victim of secondary syphilis, came for additional treatment concerning his eyes. He had stellicidium lachrymarium. The lower lids and cheeks were red, the latter excoriated; the eyes irritable, complaining of heat and itching, these aggravated by the light, dust, or wind. The puncta lachrymalia were constricted, as well as the lower canaliculi, the former slightly excoriated. No doubt the tumefaction attending the excoriation and syphilitic exudation encroached upon the lumen of the canaliculi. As I had no Bowman's probes small enough to enter the narrow puncta, new broom-straws were selected, graduated in size to meet the required dilatation, were pointed,
sand-papered, submerged in hot water, and given the proper curves by flexion. The hot water made them aseptic, tough, and increased their flexibility, and after removal from the hot water they permanently maintain the proper curve. Three dilatations were necessary to maintain the desired patulency. The antisphilitic treatment was increased in dosage, and a mercurial salve applied to the lower lids and cheeks. Recovery complete.

Case 4. D. N., negro, aged fifty, good health, has a tumor of lower lid the size of a walnut, pushing it upward, encroaching upon the canthus, obstructing vision in the lower field. The growth was of several years' duration; at first was near the size of a pea, and was diagnosed chalazion. A longitudinal incision on the inner surface of the lid was made, the contents evacuated by nipping the tumor between the thumbs freely, producing thorough removal of its contents, allowing its walls to collapse and unite by adhesive inflammation. Contents were semi-fluid and sebaceous. Recovery.

Case 5. T. G., aged thirty-seven years, male, has a large pterygium crassum, left eye, inner canthus; operated on under cocaine. The apex of the growth extended partially over the pupil, obscuring vision. Operation by excision done. After the apex was dissected from the cornea the conjunctival incisions on the upper and lower margins of the pterygium were made about two lines from the cornea, and rhomboidal shape (after Alt). The lips of the wound by this method are better approximated, the line of union straighter, the production of a thick, prominent cicatrix avoided. To avoid an irregular and uneven outline to amateur operators, the threads should be introduced before the incisions are made. On account of the large size of the pterygium a secondary operation was necessary. Recovery complete.

Case 6. G. K. W., aged forty-five years, engineer, has a pterygium crassum, medium size, right eye, inner canthus, extending over the cornea, partially obscuring the sight, attended with much irritation, heat, redness, and lachrymation, which greatly interferes with driving his locomotive. Operation was done by excision (after Alt); recovery.

Two years later patient returned on account of multiple small growths on the eyelids injuring his sight, the size being from a pea to a cherry. The lids were cocained, everted, the growths incised from inner surface, contents evacuated between the thumbs; the walls collapse and heal by adhesive inflammation. Recovery.

Case 7. G. A. D., female, aged thirty-five years, has double pterygium, left eye, extending partially over cornea from either side about one line. Excision by Alt's method, under cocaine. Recovery.

Case 8. F. G., aged twenty years; general health good. When an infant had ophthalmia neonatorum. A sequel to this was a large central leucoma of each cornea covering the pupils; in the peripheral field could see light. As the right eye was the most favorable for an operation an iridectomy was done in the upper and right field of the iris which gave a vision of 4/10. Twenty-four hours after operation a hemorrhage into the anterior chamber supervened. In the absence of the nurse, patient removed the bandage, exposed the eye to the bright sunlight to test the visual power. The bandage was reapplied, the hemorrhage absorbed in a few days, and the visual power expressed above was present. Since this he has been satisfied with the result, and will not have the other eye operated on unless the sight in this one fails. He is now able to be self-sustaining, has married, and does good farm work.

Case 9. Mrs. X., aged about fifty years, poor health, has had frequent attacks of iritis, is highly rheumatic, has partial occlusion of pupils. The rheumatic dyscrasia was corrected by long and tedious constitutional treatment; efforts were made by medicine to restore sight; at last patient consented to an iridectomy, on account of the previous attacks of iritis and the synechia and exudations attending them. The operation did not improve the sight, though the general health is good.

Case 10. Infant, white, has ophthalmia neonatorum to develop twenty-four hours after birth. With thorough cleansing with hot water Oj, salt 5j, argentii nit. grs. iij, aqu. 3j, instilled every six hours, and boric acid, grs. xij to aqua 5j, used hourly after cleansing. The case rapidly ended in recovery.
Case 11. J. McK., aged thirty years, when a child had right eye to burst by being hit on it with a rock; enucleation was not done. In the left eye sympathetic ophthalmia set in and he did not consult a competent physician until the sight was lost, then nothing could be done. Several years after losing his sight acute remittent fever developed, attended with trifacial neuralgia more intense in supra-orbital nerve, following this was irido-choroiditis with hypopyon. The anterior chamber was tapped. In ten days another accumulation of pus in the chamber presented and was again evacuated, with subsidence of eye symptoms.

Case 12. G. M., male, aged forty-five years, has had trachoma ten or fifteen years, but recovered. From cicatricial contractions of the palpebral conjunctive entropion with trichiasis has existed two years with pannus from palpebral pressure and trichiasis; sight greatly impaired, about $\frac{2}{10}$ R. E., $\frac{2}{10}$ L. E.

Webster's operation was done under cocaine. An extensive canthotomy was done on each eye several days before this. After recovery of these wounds the lining of the upper lids, beginning at the outer angle, was dissected, in length to $\frac{1}{4}$ of an inch from puncta lachrymalia, and $\frac{1}{4}$ inch toward the base or retro-palpebral fold; the integument, $\frac{1}{4}$ inch from the edge of lid and $\frac{1}{4}$ inch wide the length of the lids, was removed, thus making button-holes of the upper lids, the fibers of the orbiclaris here and there nicked so as to weaken their spasmodic action; the lips of the integument were now approximated with three fine sutures and the button hole sewed up; union complete by primary vision; stitches removed on third day. Thorough asepsis was used. By these sundry operations the lids were elongated and made capacious, tensions and pressure removed by loosening the conjunctiva from the margin of the lids; tension was removed from the under surfaces of the lids and the latter unfolded and elongated by the button-hole operation; on the outer surface of the lids redundant skin and tissue were removed, the lids shortened and made ectropic and giving the lashes their normal position. The pannusae rapidly disappeared under pr. ammon. muriat. grs. x, aqua $\frac{1}{2}$j. gtt$\text{3}$, instilled into the eyes every five hours; sight is about $\frac{2}{10}$ in each eye, otherwise recovery is complete.

Case 13. Miss X., aged twelve years, had measles at five years, sequel thereto was rhinitis and otitis media chronica, with ototritic left ear, deafness, watch heard on contact; also poor health. General health restored and local ailments cured. Two years later she was placed in a boarding school and has now vigorous health, is quite bright and has every appearance of precocity, but from hard study and close application headaches of great intensity begin. A physician was consulted, who advised the lady to be taken from school. Diagnosis, congestion of brain; that the brain is developed faster than the skull and that suspension from mental work must cease for one or more years. The headache did cease soon as she was removed from school and studies suspended; but being a pet and no domestic duties being placed upon her, crocheting is resorted to as a past-time and the headaches return in a few hours. The case is again returned to me: myopia is diagnosed, V. R. E. $\frac{2}{10}$, V. L. E. $\frac{2}{10}$; with concave No. $\frac{1}{2}$ right eye and $\frac{1}{2}$ left eye vision is $\frac{2}{10}$. The glasses give perfect ease; pupil is again placed in school, and is able to do the necessary amount of study free from eye pain and headaches.

Case 14. E. J. Bastin, aged forty years, general health good, has had granular lids twenty years, is now blind in both eyes; in the left can see daylight, in the right blindness is complete; both eyes have pannusae and are keratitic, and for a long time sight had been absent in right, about one year and a half. On consultation he was told the left eye could be restored, but in the right it was quite doubtful. Mr. B. was treated eighteen months, treatment embracing thorough asepsis, astringents, anodyne lotion with astringents, the yellow oxide of mercury salve, calomel dusted on the lids, the curette and cautery, sulphate of copper and alum; the muriate of ammonia was more beneficial in grs. v.—xv to aqua $\frac{1}{2}$j than any other preparation to the pannusae and keratitic inflammations. The patient was seen three times a day in my office and the remedies used with due judgment. The improvement was gradual, yet at times there were recessions for a few.
days. No one remedy is entitled to the cure. Great patience was required by both patient and physician; and this case is a typical one, proving the curability of trachoma even in in-veterate cases, when complete co-operation, perseverance, patience, and a determination to have a cure is undertaken. One might say, why was not jequirity used? Was not this a typical case for it? Answer. No, because the eyes were attended with copious secretions of mucus or muco-pus, otherwise it would have been the remedy par excellence. Indications for the use of jequirity are trachoma with dry lids and pannus, and absence of secretions. Sight in left eye $\frac{2}{5}$, right eye $\frac{2}{5}$; has a small leucoma. Recovery complete, and patient is now teaching school.

Case 15. W. P., thirty-five years old; good health; has had trachoma eighteen months, with pannus; the granulations were very numerous and exuberant, projecting far beyond the surface. The eyelids were made aseptic, cocainized, and the granulations trimmed with fine scissors even with the surface. Sulphate of copper was now applied and sulphate of zinc, grs. iij to aqua $\frac{5}{5}$j, drops three instilled into each eye three times a day, and hydrarg. ox. flav. gr. $\frac{1}{2}$, lanoline $\frac{5}{5}$s, a piece size of a pea placed into each eye at night, and massaged. Improvement was rapid; in six weeks the pannuses and keratitis had subsided. On account of poverty patient went to city to act as nurse and finish treatment. Had this case not been attended with a juicy condition of the conjunctiva it would have been an admirable case for jequirity.

Case 16. A. C., fifty years old, has had granular lids for several years; at present has pannus and keratitis, both eyes, just can see how to go about, under treatment six months; zinc, alum, lotions, yellow oxide of mercury ointment, sulphate of copper application, nitriate of ammon. sol. grs. v—xv, $\frac{3}{5}$j, were used as seemed indicated. Recovery complete.

Case 17. W. B. was unloading lime, barrel burst, when the unslacked lime went into the eyes, mouth, and face. The eyes were cocaine, lime removed, then atropined and vaseline thoroughly and abundantly applied. A dozen cotton cloths, two by six inches, were folded, laid on a lump of ice and applied to the eyes every five to fifteen minutes, pro re nata, day and night. The lime cauterized the lids and made three peripheral ulcers on the cornea. Recovery was complete in two weeks, with perfect sight. The eyes were kept under atropine until the corneal ulcers healed.

Case 18. Miss S. is quite myopic. R. E. V. $=\frac{1}{2}$, L. E. V. $=\frac{1}{2}$ with $-7$. R. E. V. $=\frac{1}{2}$, L. E. V. $=\frac{1}{2}$, though $-14$ had to be given and worn for a year before the full correction could be tolerated in reading and doing sewing. Before wearing glasses she had headaches, asthenopia, red and burning eyes.

Case 19. E., compound myopic astigmatism. R. E. V. $=\frac{1}{2}$, L. E. V. $=\frac{1}{2}$; atropia. R. E. V. with $-37=\frac{1}{2}$, with $-49$ cyl. ax. $150^o=\frac{1}{2}$, L. E. V. with $-18J=\frac{1}{2}$ $-18J$ cyl. axis $0^o=\frac{1}{2}$. Had violent headaches on reading and sewing or looking at close objects.

Case 20. Mrs. I., thirty-three years old; general health good. Thought she had perfect vision, but, on attempting to read with left eye closed, finds that she can only see the lines on the paper with the right. R. E. V. $=\frac{1}{2}$; atropia. With $-6=\frac{1}{2}$ $-13\frac{1}{2}$ cyl. axis $0=\frac{1}{2}+L. E. V. =\frac{1}{2}$. Plane glass ordered for this eye. She doubtless had done her reading and sewing with left eye from childhood, the right not playing any material part in vision until the correcting glasses were prescribed, thereby exercising the eye, increasing its nutrition, and awaking dormant function.

Case 21. J. B., aged sixty years; good health. Eyes have been presbyopic for some time as well as hypermetropic. He wore spherical glasses, had traumatic kerato-iritis. Since recovery finds the lines in reading run together, the eyes get hot and burn. R. E. V. $=\frac{1}{2}$, L. E. V. $=\frac{1}{2}$; atropia. R. E. V. with $+7\frac{1}{2}=\frac{1}{2}$, L. E. V. with $+7\frac{1}{2}=\frac{1}{2}$ with $+74$ ax. $100^o=\frac{1}{2}$. These glasses give perfect satisfaction.

Case 22. L., male, aged forty-five; good health. Has fatigue and pain of eyes on reading, the lines run together, become solid blocks of lines. R. E. V. $=\frac{1}{2}+L. E. V. =\frac{1}{2}+; atropia. R. E. with $+49$ cyl. ax. $75^o=\frac{1}{2}$ with $-148$ cyl. ax. $0=\frac{1}{2}$. L. E. V. with $+49$ cyl. ax. $75^o=\frac{1}{2}$ with $+49$ ax. $0=\frac{1}{2}$.
THE AMERICAN PRACTITIONER AND NEWS.

Case 23. Mrs. X., aged twenty-eight years; general health good; has the subjective symptoms of headache, pain in the eyes, fatigue on reading or sewing. Ophthalmoscopic examination shows evidences of choroidal lesions. R. E. V. = \( \frac{24}{20} \), L. E. V. = \( \frac{20}{20} \); atropia. R. E. V. = with +24\(\frac{1}{2}\) cyl. ax. 60° = \( \frac{3}{20} \) with -37 cyl. ax. 0° = \( \frac{3}{20} \), L. E. V. = with +30 cyl. ax. 90° = \( \frac{3}{20} \) with -30 cyl. ax. 0° = \( \frac{3}{20} \).

Case 24. A. H. (hypermetropic astigmatism), aged twelve years, male; general health good; has constant nystagmus (winking) of upper lids, narrows the canthi when reading, and wears a frown and holds his head to one side to get a better perspective of the lines or objects. Ophthalmoscopic examination shows simple hypermetropic astigmatism to exist. R. E. V. = \( \frac{20}{20} \); L. E. V. = \( \frac{20}{20} \); atropia. R. E. V. = with +37 cyl. ax. 80°, \( \frac{20}{20} \), L. E. V. = with +37 cyl. ax. 85°, \( \frac{20}{20} \).

Case 25. Mrs. X., aged forty-seven years (hypermetropic astigmatism), health feeble; has asthenopia, pain on reading or sewing, violent headaches, carries two or three pairs of glasses (spherical) all the time. When one pair gives out, that is, the eyes will not tolerate them any longer, she resorts to another pair (weaker or stronger). She has been the prey of the "spectacle sharks," and has hypertrophic rhinitis, nasal stenosis; in left nasal chamber there is a large polypus. Patient is a "mouth-breather," and has had hay-fever every August for years. Treatment was first directed to nose and throat, the polypus snared, the "turbinates" chonimised, and the upper air-passages placed in a normal state, then the errors of refraction were corrected. R. E. V. = with +24\(\frac{1}{2}\) = \( \frac{20}{20} \) with +148 cyl. ax. 180° = \( \frac{20}{20} \), L. E. V. = with +24\(\frac{1}{2}\) = \( \frac{20}{20} \) +148 cyl. ax. 0° = \( \frac{20}{20} \).

Case 26. Simple myopic and mixed astigmatism. Aged sixteen years; excellent health; belongs to a family of myopes; has been the prey of "spectacle sharks," sees better without the quack's glasses than with them; can only see how to read a short time without glasses. Her glasses obscure vision. R. E. V. = \( \frac{20}{20} \), L. E. V. = \( \frac{20}{20} \); atropia. R. E. V. = with -7\(\frac{1}{2}\) cyl. ax. 180°, \( \frac{20}{20} \), L. E. V. = with -18\(\frac{1}{2}\) cyl. ax. 180°, \( \frac{20}{20} \) with +15 cyl. axis, 90° = \( \frac{20}{20} \).

Case 27. B., aged fifty-five years, laborer; general health good as far as is known; has no inherited dyscrasia nor syphilis; "had an itching and burning sensation on the right eyeball, thinking there was dust or wild hairs in the eye." On inspection in the mirror he noticed a reddish-brown deposit on the margin of the cornea. This increased day by day rapidly. In two weeks the sight was out. In a month the tumor was the size of a walnut, was quite vascular, bled freely on slight touch, was very painful, and the least rotation caused intense pain, as well as exposure to the sun or air. To the touch it was tense, irregular, and elastic; the color increased to a dark-brown or blackish-brown, the general surface nodular or lobulated. The tumor projected far between the lids on the cheek. Three weeks after its appearance the upper eyelid took on the same morbid action and was confined to one fourth inch from the margin of lid from inner to outer canthus. The pain was intense, except when under the influence of morphine or cocaine locally. In thirty days after appearance of tumor sympathetic irritation and inflammation was manifested in the left eye, attended by profuse lacrymation, burning and scalping of eye, redness, photophobia, sight impaired, ciliary neuralgia. Pain increased on exposure to light or air. The proper treatment indicated was enucleation of the right eye and removal of growth from or amputation of right upper lid, to which the patient consented. Chloride of zinc paste was then applied. In two weeks the wound had healed, the sympathetic disturbance subsided in left eye, and vision was thoroughly restored. The specimen was destroyed by the office boy before a microscopic section was made. The age of patient, short duration of the growth, the color, the pain, hemorrhagic tendency, and its irregular, lobulated exterior are highly indicative of a melano-carcinoma.

STANFORD, KY.

The Emperor of Germany, in honor of Virchow, has decreed that Thirty-second Street, leading to rear of civil hospital, Friedrichs-haus, in Berlin, shall receive the name of "Virchow's Street." He, as is known, promoted the foundation of this hospital, established chiefly by his gift.
OUR DRINKING-WATER.

BY C. J. RADERMAKER, M. D.
Research Analyst.

Water is a general nutrient. Pure water is therefore absolutely necessary for cooking and drinking. Drinking-water should contain none or only a trace of ammonia and nitrous acid. The microscope should show the absence of large quantities of living and dead organisms, especially those that generate disease. The following gives the result of a chemical, microscopical, and bacteriological examination of hydrant and well-water, made during the months of September, October, and part of November, when the water was the lowest in the Ohio River. The well-water was taken from a wooden stock pump, the hydrant-water directly from a hydrant in the house. The result obtained is given for 100,000 parts of water.

Analysis of Hydrant-water. Specific gravity, 1001; temperature, 60° Fahr.; reaction, neutral; taste, flat; odorless; color, slight yellow tinge. Sediment in 100,000 parts, after standing for forty-eight hours in a closed glass vessel, was 13,620 grams. This was incinerated, and the residue treated with carbonate of ammonia and again heated. This left 10.430 grams of inorganic matter. 13,620-(10.430) = 3,190 grams of organic matter in the sediment. The water after separation of the sediment was evaporated to dryness on a water-bath, and then heated to 180° C. (356° F.) and allowed to cool in an exsiccator. This left a solid residuum of 12.310 grams. This residuum on analysis was found to contain 9.310 grams of inorganic salts. 12.310-(9.310) = 3 grams of organic matter.

Analysis of Pump-water. Specific gravity, 1001; reaction, neutral; color, transparent; taste, fresh and palatable; sediment, none. The same quantity was evaporated on a water-bath and the residue heated to 356° F., which left a residue of 39.280 grams. This on analysis was found to contain 38.130 grams of inorganic salts. 39.280-(38.130) = 1.150 grams of organic matter. It will be seen from this that organic constituents largely predominate in river-water, and that the inorganic salts predominate in pump-water. But as the inorganic constituents are perfectly harmless, we will pass them by without going into details.

Organic Matter. Free ammonia was estimated according to the method of Frankland and Armstrong, with Nessler's reagent. Organic nitrogen was converted into ammonia by Kyeldal's process, distilled, and nesslerized. Nitrous acid was estimated by Trommsdorf's method with iodide of zinc and starch; organic carbon, according to the method of Wolf, Degner, and Herzfeld, with the following result:

<table>
<thead>
<tr>
<th>HYDRANT-WATER.</th>
<th>WELL-WATER.</th>
</tr>
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<tbody>
<tr>
<td>Free ammonia</td>
<td>.004</td>
</tr>
<tr>
<td>Ammonia</td>
<td>.035</td>
</tr>
<tr>
<td>Nitric acid</td>
<td>.001</td>
</tr>
<tr>
<td>Organic carbon</td>
<td>.563</td>
</tr>
</tbody>
</table>

Microscopical and Bacteriological Examination. Sterilized gelatine was prepared by heating ten per cent of gelatine with Löffler's fluid in a steam sterilizer for twelve hours, and filtering; the solution made slightly alkaline with C. P. bicarbonate of soda, again heated for several hours in a Papius's tube, and filtered through a funnel kept hot by boiling water. Part of this food was put in test-tubes while still liquid; to one tube one cubic centimeter of well-water was added, to the other one cubic centimeter of hydrant-water. The liquids were then poured on sterilized glass plates to gelatinize, each plate containing about one fourth of a cubic centimeter of the water to be examined. These plates were placed under a sterilized bell-jar, and examined microscopically from day to day.

HYDRANT-WATER. The plates containing one cubic centimeter of hydrant-water almost completely liquified in twenty-four hours, and when examined microscopically five thousand colonies were counted on the first day, in the second twelve thousand, and on the third they were uncountable. In the unique furred portion of the gelatine were gray spots; where seen these spots were touched with a sterilized platinum needle, and a sterilized boiled potato was vaccinated with it. (All manipulations were carried on under the microscope.) This sterilized potato was submitted to a temperature between 70° to 80° Fahr. for eight days. At the end of the second day the upper surface became moist and shiny, and of a grayish-white color, while the outer edge of the potato became violet.
this violet portion separating farther from the gray from day to day until it entirely disappeared.

A fresh sterilized potato was now vaccinated from the first potato-culture, and at the end of the fourth day a third potato was vaccinated from the second culture, in all cases only the white growth being used. On the fifth day of the third culture the white surface was touched with a sterilized platinum needle, the needle immersed in a drop of distilled water upon a glass slide, and allowed to dry at ordinary temperatures, and colored with carbol-fuchsin. If this colored slide is now examined microscopically, the bacilli appear as short bodies with round corners, about one third as broad as long. If blood serum is vaccinated with the potato-culture, a grayish-white growth appears upon the surface, but no liquefaction of the crust is produced. If a hanging drop of distilled water, to which some of the potato-culture has been added, is examined microscopically, the bacilli will be found to possess worm-like movements, showing that they are living organisms. If a boiled potato is vaccinated with the liquid portion of the gelatine-culture, the coloring matter of the red and violet bacillus will cover the entire surface of the potato in twenty-four hours.

The potato is unquestionably the best soil for separating the different varieties of bacilli found in water. If a potato that has been vaccinated with the gelatine-culture is examined with the naked eye four or five days after the vaccination, you will find the different colonies are separated one from the other, and occupy separate places on the potato. If a fresh sterilized potato is now vaccinated with one of these colonies, you get a pure culture of that variety. By this means I have separated the red, violet, yellow, or fæcal and shiny bacillus. The latter resembles the typhoid bacillus very much. It seems to be with these microbes the same as with every living being, a struggle for existence. The shiny potato-culture of these waters, to say the least, looks suspicious, and points to the presence of typhoid bacillus, there being no other bacillus known that produces that peculiar growth upon potatoes. This bacillus is also readily colored with carbol-fuchsin, which is another characteristic of the typhoid bacillus. If the moist surface of the vaccinated potato is touched with a piece of red litmus paper, it turns blue, showing the presence of an alkali. This alkalinity took place in both the well- and hydrant-water cultures, but the quantity was much greater in the hydrant-water culture. If the potato cultures that have an alkaline reaction are washed with ninety-eight per cent alcohol containing a little C.P. hydrochloric acid, and filtered, the filtrate evaporated to dryness and redissolved in alcohol, and the alcoholic solution allowed to evaporate spontaneously, a crop of long crystalline needles is obtained, which are freely soluble in water. When an aqueous solution of this salt was treated with Nessler's reagent, a deep scarlet color was produced. If a few of these needles are heated with caustic soda, the smell of ammonia is evolved.

An alcoholic solution of this salt was treated with an alcoholic solution of platonic chloride. This produced a lemon-colored precipitate. The precipitate was washed with ether-alcohol and dried in an exsiccator over SO₂H₂O. 0.050 gram of this double salt left after incineration 0.022 gram of metallic platinum.

Metallic Platinum, Am't of Double Salt. Equiv. of Plat. 0.022 : 0.050 = 198 : X × 450 450 — 340 + 73 = 37, representing two molecules of base. 37 + 2 = 18, the molecular weights.

Calculated Formula. (NH₄HCl)₂P₂Cl₆ = 41.29 per cent Platinum.

Found. 0.022 + 0.050 = 41.00 per cent Platinum.

These reactions and the analysis of the platonic salt conclusively prove that this base is ammonia.

Sterilized beef broth was vaccinated with the gelatine-culture of hydrant-water, and submitted to a temperature of 90° F. for seven days. The fluid was then treated with C. P. HCl, and evaporated to a syrupy consistence and extracted with absolute alcohol, the alcoholic solution evaporated to dryness, and the residue treated with hot alcohol and filtered, the filtrate treated with an alcoholic solution of mercuric chloride. The precipitate formed was washed with alcohol, then suspended in alcohol, and decomposed with hydrogen sulphide; the solution filtered from the precipitated sulphide of mercury and evaporated to
dryness; the residue dissolved in alcohol, filtered, and allowed to evaporate spontaneously. This left a crop of long slender needles. A solution of this salt gave an orange-red precipitate with auric chloride, a yellow with platinic chloride, a white with mercuric chloride and potassium-mercuric iodide.

0.229 gram of the platinic double salt left after incineration 0.096 gram of metallic platinum.

0.096 : 0.229 = 198 : \( \sqrt{473} 
\)

473 - 340 + 73 = 60, representing two molecules of base.

**CALCULATED FORMULA.**

\((\text{CH}_3\text{NHCl})_2\text{PtCl}_4 = 41.87 \text{ per cent Platinum.}\)

Carbon: 5.07 per cent.
Hydrogen: 1.69 per cent.
Nitrogen: 5.91 per cent.

**FOUND.**

0.096 : 0.229 = 41.92 per cent Platinum.

0.2241 gram of substance gave 0.0413 gram of \(\text{CO}_2\) = to 0.01226 gram of carbon = to 5.02 per cent of carbon, and 0.0321 \(\text{H}_2\text{O}\) = to 0.00356 gram of hydrogen = to 1.59 per cent \(\text{H}_2\text{O}\). 0.1971 gram of substance gave 9.8 cubic centimeters of moist nitrogen. Barometer, 750 millimeters. Temperature, 66° F. = 5.63 per cent nitrogen.

Beef broth when vaccinated with gelatine-culture of pump-water did not produce this base, but in both cases large quantities of \(\text{NH}_3\) were evolved.

A solution of the chloride of this base was treated with recently precipitated oxide of silver for twenty-four hours, the solution filtered from the chloride of silver and allowed to evaporate. This left a crystalline residue which was soluble in alcohol and water, but insoluble in ether.

The aqueous solution of this base had an alkaline reaction, and combined with acids to form salts.

It is evident from this investigation that hydrant-water contains microbes that will produce ptomaines; for that reason it would be safer to boil it before using, especially when the river is at a low stage.

**Louisville.**

**Societies.**

**MEDICAL AND SURGICAL SOCIETY OF BALTIMORE.**

Stated Meeting, held Thursday, Nov. 12, 1891.

The seven hundred and thirty-first regular meeting of the Society was called to order by the president, Dr. David Street.

Minutes of previous meeting read and approved. Dr. A. B. Arnold was unanimously elected to membership.

Dr. Wilmer Brinton read a paper entitled Twin Pregnancy with Placenta Previa Centralis.

**DISCUSSION.**

Dr. Thomas A. Ashby: Dr. Brinton is to be congratulated on delivering these twins alive, and to have saved the mother, thus caring for the lives of three individuals at the same time. I have been fortunate in having had only a few cases of placenta previa, in all of which the mothers were saved, but the children have all perished. A woman whom I had attended once before aborted; in this case the placenta was attached over the cervix. She has had two children born in a normal way since and another placenta previa with an abortion at four months. Laceration of the cervix is the cause of more intra-pelvic disease than any other one cause I know of. In my abdominal work I find there is a direct connection with lacerations of the cervix. One lady, seven years ago, aborted at seven months, when she had a laceration of the cervix; she had a tender ovary and had catarrh of the uterus, for which she came under my care. She was delivered about ten weeks ago; it was a hurried labor. I found a large laceration arrested involution, and she was on the point of septic inflammation. She made a good recovery, and I turned her over to her family physician. In these cases of cervical laceration we should not trust our patients to a nurse, we should wash out the uterus ourselves. In washing out the uterus I find it a good plan to pass the solution in on cotton wool on an applicator, and swabbing it around; this brings out the fragments better than the douche. I believe that seventy-five to eighty per cent of pelvic inflammations in
multipara are due to neglected lacerations of the cervix, allowing of septic absorption. Put in a bivalve speculum and wash out with an anti-septic solution. The gynecologist will stop work if the general practitioner will use these measures.

Dr. W. S. Gardner: I congratulate Dr. Brinton on delivering both infants alive. In regard to phlegmasia alba dolens, I think it is a septic process; it probably is not a phlebitis, but most likely it is an inflammation of the connective tissue around the vessels, and the clot in the vessels is a secondary process. A number of post-mortem in these cases have shown no clot in the vessels. Now, as to cleaning out of a uterus, there are several methods of doing this. First, there is the douche, that will remove the ordinary loose clots. Then there is the swab, that will remove some things that the douche will not, but not much; the most efficacious method of removing bits of placenta is by the use of the curette, and this method should be more generally practiced than it is.

Dr. Wm. H. Norris: There is one point that forces itself on my attention, and that is that young physicians are too prone to trust the nurse, presuming that their directions will be carried out. None but medical men or trained nurses can do these things right. A case occurred in my neighborhood where the physician gave the nurse instructions to wash out the uterus twice daily. She washed out the vagina, and in a short time a consultant was called in to see the case, when it came to light that the uterus had not been washed out; the physician did it himself after that. And this shows that the only safe plan in these cases is to do the work yourself.

Dr. Brinton: I agree with Dr. Norris that it is not safe to trust too much to the nurse in these cases, but the average doctor couldn't wash out the uterus properly; it requires some training to do this, and unfortunately all doctors have not had this training. For the same reason I do not agree with Dr. Gardner in the use of the curette; curetting a uterus is attended with some danger, and I think it should be done guardedly. The point I wish to bring out in my paper, and which seems not to have been touched on in the discussion, is prompt treatment in these cases. I prefer podalic version, but forceps can be used in some of them, when we may do as well; but in the vast majority of cases it is better to turn and deliver. Three months ago, in a case of a mulatto at term, with Dr. Robinson, we did a podalic version and did it promptly. Both mother and child were saved, and the child is living to-day. This is the only case I know of where the child has survived so long. The point I wish to emphasize is that these cases should be treated promptly.

Dr. W. S. Gardner read a paper entitled Cephalic Version.

DISCUSSION.

Dr. F. C. Bressler: I remember a case in which I should have done a cephalic version, but in my haste I did podalic version. She was a primipara, bleeding from a placenta previa. I found I could cause considerable mobility of the uterus by placing my hand on the abdomen. I ruptured the membranes and introduced my hand for a leg and did podalic version. The child was lost, whereas, had I done cephalic version, as I could have done, in all probability the child would have been saved. In another case I attempted to do cephalic version and failed. It was a midwife case, a multipara at eight months. She had a large vagina, so that I could introduce the whole hand. I put her in the knee chest position, but with all my manipulation I could not get the head in position, so had to do podalic version. In this case the child was saved. Many doctors do not seem to know there is such a thing as cephalic version. If it were more generally practiced there is no doubt that many would be saved that otherwise perish.

Dr. F. C. Bressler reported A Case of Probable Fracture of the Sixth or Seventh Cervical Vertebra.

Dr. Wilmer Brinton reported the complete recovery of the case of purpura hemorrhagica rheumatica that he exhibited to the Society on the 23d of April, 1891. After nine months of treatment he has returned to his work as clerk. The treatment at first, as I stated when I exhibited him here, was the ad-
ministration of gallic acid, tannic acid, etc., all of which seemed to do him no good. Then I put him on large doses of salicylic acid, large doses of elixir of iron, quinine, and strichnia; and I am glad to say, for the encouragement of some of you who may look upon your cases as hopeless, as I did on this one, that after prolonged and persistent treatment he has returned to his work.

J. W. M. FUNCK,  
Recording Secretary.

**Correspondence.**

**LONDON LETTER.**

[FROM OUR SPECIAL CORRESPONDENT.]

A benevolent member of the Royal College of Surgeons has just suggested that medical practitioners should gather together their outworn and discarded instruments and appliances and bestow them on the missionaries, lay and clerical, in foreign lands. Old operation cases, knives, tourniquets, metal catheters, sounds, trocars, teeth instruments, etc., are all welcome, and their value in the lonely positions which many missionaries occupy, separated perhaps by two hundred or more miles from any assistance, can hardly be overestimated. The gentleman who makes the appeal knows an instance of a missionary who had no other instruments than an ordinary knife and a pair of scissors with which to remove the frost-bitten foot of a North American Indian, in whose case the operation was so imperative that he operated with these. Luckily the patient recovered. A beginning has been made by forwarding articles which could be spared to the Missionary Training College.

Many a man whose courage is in a general way above suspicion might shrink from the task set himself by Dr. Cooke, who has tried in his own person the edible qualities of sixty-five kinds of British fungus, all of which save one or two are contemptuously dismissed by the ignorant under the name of “toad-stools.” A book on this subject even suggests that the list might be extended to some others which have only got a bad name through ignorant cooks; as, for instance, the horse mushroom, which causes “unpleasant symptoms” when fried in an excess of butter, but is otherwise harmless.

By the will of the late Dr. H. E. Price, of Brighton (an old student of the hospital and college), the sum of £5,000, free of legacy duty, is bequeathed to the London Hospital and Medical College to found scholarships. Dr. Langdon Down, an uncle of the testator, is one of the trustees.

Great satisfaction is felt in India at the news of the arrival of Dr. G. S. Robertson, who started from Cilghit a year ago for the wilds of Kaffiristan, and had since not been heard of. His explorations had carried him through the heart of this hitherto unknown region, and he is reported to have returned to India, having pierced the veil which has up till now hung between it and any accurate knowledge of this mysterious people and country. Month after month, entirely alone, Dr. Robertson, it is stated, lived among his barbarous hosts, dwelling in their villages, watching their sacred rites, coming across war parties in wild forays, at one time an honored guest, the next surrounded by frantic crowds swayed by all the furious impulses of fanatical savages.

Prof. Leech, of Manchester, says that if the public knew the way in which drugs are sent over to this country they would rub their eyes. At one time he had been accustomed to visit the great drug market in Fenchurch Street, and had wondered to see the vast amount of drugs of all kinds and in all conditions that came in. The curator entrusted with the sampling found that different parcels of the same drug varied enormously. Dr. Leech himself was accustomed to procure drugs for the College, and in doing so came across many strange specimens. He has recently obtained some ipecacuanha which would puzzle many to recognize. All these various drugs, he says, are bought by brokers merely as a matter of speculation, and undoubtedly the larger portion of them was made into medicine.

The surplus of the amount collected on the occasion of Prof. Virchow's seventieth birthday, after defraying expenses originally contemplated, is twenty thousand marks, which sum has been added to the "Rudolf Virchow Fund" for scientific investigation. The total
THE AMERICAN PRACTITIONER AND NEWS.

of the latter is now ninety-seven thousand marks.

According to the last census it is estimated that there are twenty thousand women in the United Kingdom who earn their living by nursing. The total appears large, but not larger than might be expected, if it is considered that the nursing staff of the largest hospital in London numbers two hundred and fifty, and that the nursing staffs of the seven largest hospitals reach a total of one thousand; and that there are one hundred and twenty-three hospitals in London, besides the numerous institutions which supply private nurses, of which several employ over one hundred women. This large band of nurses has been created since the days of the Crimea, when Florence Nightingale first roused the enthusiastic admiration of the whole country. The training for the position of qualified nurse is by no means superficial or to be undertaken lightly. A nurse seldom works less than twelve hours a day. As a rule a probationer rises at 6 a. m. and goes to her work at 7. Here the first thing is to sweep and dust and make beds, so that the whole ward may be in perfect order before 10, when when the house surgeon and his dressers come round. The nurse has to attend on these, and when they have departed she has to serve the patients' dinners, then she gets half an hour for her own dinner. In the afternoon there may be operations to attend in the operating theater, or visiting staff to wait on, or it may be one of the afternoons on which visitors are admitted. Afterward there is tea to be served, then a round of bed-making, temperature-charting, and general preparations for the comfort of the patients during the night. At nine o'clock the day nurses go away to their suppers and the night nurses come on duty. Each nurse gets two hours off duty every day or every other day, according to the hospital she is in, and one whole day off every month. The wages of a probationer during her three years of training are usually £10, £15, and £20; the wages of a "sister" or head nurse in charge of wards vary from £30 to £60; the wages of a matron average about £150.

Some of the natives, according to an Indian medical officer, of the Northwest Provinces of India have queer ideas concerning vaccination, and are opposed to it thoroughly. They see in it an invention of the enemy. It is simply a wicked scheme of the white man to interfere with their most cherished plans, and nothing that can be said or done will persuade them to the contrary. As to believing that the perfidious white can have the slightest regard for their welfare when he comes vaccinating, this is not to be seriously entertained for a moment. They have complete faith that some day or other a child will be born which is destined to drive the English out of India, and who will then simply go round and conquer the world. However, according to the natives, this child will be quite different to any other in his composition, inasmuch as he will have milk in his veins instead of blood; of course the vaccinators know this, and they are simply trying to come across the youth.

A query lately appeared in a medical paper as to what is the most costly medicine. A contemporary replied that a product called metallic gallium is valued at £20,000 per pound, hyoscyamin at £634 13s 4d per pound, homatropin and crystalized boron at £700, and that cocaine used to be worth £1,700 per pound.

The Lord Mayor has made another distribution, at the Mansion House, of medallions and certificates of the St. John Ambulance Association gained recently by members of the city police force. It is now made compulsory upon every man joining the force to go through a course of instruction in ambulance work and in the art of "first aid to the injured."

The water-color drawings presented by the late Sir Prescott Hewitt to the British nation are now on view at the South Kensington Museum. They are considered to be a well-selected series of much of the best English work during the last half century, Sir Prescott Hewitt being not only a judicious and liberal patron of contemporary art, but also an accomplished artist.

"The Surgical Treatment of Trigeminal Neuralgia" is the subject of the next Lettsomian lectures of the Medical Society of London. Prof. William Rose has been selected as the lecturer.

LONDON, December, 1891.
Abstracts and Selections.

The Prevention of Colds and Their Sequel by Surgical Methods. — There is, perhaps, no class of diseases to which humanity is more subject than rhinitis, or common coryza, nor are there any to which less attention is paid, and perhaps not any of which less knowledge is had of their true character and proper treatment. It is apparent that the larynx and bronchi soon give way to frequent inroads of these attacks.

In the simplest inquiry into the functions of the nose as a breathing organ, we find that the mucous membrane covering the turbinated bones is composed of erectile tissue, styled by Bigelow, of Boston, the turbinated corpora cavernosa. It is composed of large venous sinuses, which can be suddenly filled by the capillaries which open abruptly into them, causing distension and erection.

This arrangement, in combination with the vibrissae and ciliated epithelium, serves the twofold purpose of acting as a guard against the entrance of cold, draughty air, particles of dust or other extraneous matter, and at the same time as a strainer for the twelve to sixteen ounces of fluid which is daily excreted to purify and moisten the air before its introduction into the larynx. This fact is well established by all authorities.

Frequent or repeated distensions or inflammatory attacks on a membrane of such an erectile character not only produce hypertrophic degeneration by adventitious connective tissue formation, but, in addition to this, and of almost inexplicable frequency, we find either a deflection or deviation of the septum from its normal position, or else an exostosis; or, more commonly still, an ecchymosis or cartilaginous spur projecting from the surface of the septum, and in many instances penetrating into the inner turbinate, or forming a bridge entirely across the nostril.

So frequently do these growths occur, and so entirely unconscious are the individuals of their presence in the nose that, were it not for the absolute certainty of the ill effects resulting for allowing them to remain, and the great benefit derived from their removal, one would almost be inclined to act according to the motto of, "Where ignorance is bliss," etc., and leave them untouched. We immediately ask ourselves, however, what might we naturally expect from the presence of such a growth, or what would result if no surgical interference were instituted? Why, of course, a narrowing of the caliber or lumen of the nostril is caused, and the space allowed for the turgescence of the turbinated corpora cavernosa is diminished, and, being so diminished, the slightest draught or exposure serves to cause sufficient swelling to completely occlude the nostril; and a sense of stuffiness or cold in the head, with all its attendant evils, constitutional symptoms, mouth breathing, etc., is felt.

The normal passage of air being prevented, all the inhaled fluid above alluded to is retained until it becomes inspissated and acrid, and causes submucous infiltration of the membrane covering the septum and turbinated bones. A portion trickles down the pharynx and irritates the larynx to such an extent that violent hawking and coughing has to be resorted to in the effort to clear the throat of its presence.

This condition is thought by many authorities to constitute one of the most common forms of chronic nasal catarrh.

Under exposure to cold or sudden changes, the pressure of the contiguous surfaces will be greatly increased, forming an inflammatory center from which many reflex phenomena occur, viz., cough, asthma, headache, vertigo, sneezing, etc.

Dr. Charles R. Weed, of Utica, New York, speaking of hypertrophic rhinitis, says:

"Resulting from these conditions, and the most frequent of all troubles is, first, deafness from pressure upon and occlusion of the eustachian apertures; next, neoplasms of various kinds, polypi, ulcers, etc.; pharyngeal disease, with its various conditions; laryngeal disease, resulting from the constant irritation produced by the dropping into the throat of the retained post-nasal secretions and the hawking process to dislodge them, often resulting in a catarrhal laryngitis, and ultimately in consumption. Asthma is a very frequent sequela. Schmiegelow, of Copenhagen, in an essay published in London this year, places the cases of asthma caused by nasal diseases at about 10 per cent in males and 6 per cent in females, and the cases tabulated, without exception, were cured by the result of proper treatment of the nasal passages. Hack, in his work published in 1884, although exaggerating the reflex conditions arising from hypertrophies, is nevertheless entitled to the credit of being really the first rhinologist to establish that asthma resulting from the hypertrophy of the turbinated bones is a fact. Woolen says that asthma is especially due to hypertrophy of the posterior tips of the inferior turbinate bones, and occasionally of the middle ones, which either touch the septum or curl on themselves and touch the outer wall of the nose. The same writer considers hypertrophy of the anterior tips the essential local factor of hay-fever, while in our own country such men as Roe, of Rochester,
Daly, of Pittsburgh, Sajous, of Philadelphia, and Bosworth, of New York, all agree with the foreign authorities just quoted. Hay-fever, with its distressing symptoms, and even aphonia, caused, in my opinion, by a nervous reflex condition in persons of a highly sensitive nature, is another of the ills following these hypertrophic conditions. Cough, in some cases, is certainly from the same source. Vertigo is often present, and even epileptiform convulsions have been reported, though rarely, as arising from these hypertrophic conditions, while supra-orbital neuralgia, diffuse headache and migraine almost invariably have their origin from nasal obstruction. I mention these diseases as being the most commonly complained of by patients suffering from hypertrophies. Of course, there are probably others more complex in character that we may be able to trace to the same origin, but, being rare, are naturally overlooked, and my time forbids a more extended research into them. I might add that Guye, of Amsterdam, Holland, finds aprosexia (inability to fix the attention) occurring mostly in young persons, and especially would-be students, a condition due to nasal obstruction and hypertrophy, while Hill, of London, also tabulates a number of cases from this cause.

Many diseases of the ear, through the eustachian tube, are directly attributable to and dependent on such growths in the nose and adenoid hypertrophy of the vault of the pharynx. Sir Morrel McKenzie says:

"The middle ear may be considered as an accessory cavity to the nasal cavity, not only during the act of deglutition, but also during quiet respiration, and this has been proven by experiment. An obstruction in the nasal cavity interfering with the admission of air to the middle ear, will cause an inward collapse of the drum, then follows congestion, then an exudation of serum, and then otorrhea; so frequent is the otorrhea of young children dependent on nasal obstruction, that if one was brought to him suffering with an otorrhea, or was a mouth-breather, he would in nearly every case without any preliminary examination introduce the forceps into the naso-pharynx and bring out a piece of adenoid tissue. Nasal obstruction by adenoid vegetation, or otherwise, in young children interferes so materially with their development that, if not corrected in early life, it may mean irremediable condition in after life. In fact it may be considered as axiomatic, that free breathing through the nose is absolutely essential to physiological life."

Dr. John McKenzie, of Baltimore, emphasizes the statement, "that inflammatory troubles of the middle ear are frequently dependent on nasal obstruction. The irritation caused by the obstruction induces an inflammatory condition of the naso-pharynx. This continued inflammation will cause a fatty degeneration of the tensor palati muscle and the eustachian tube will not be acted upon, thus involving the middle ear. Of course, the walls of the eustachians are in contact in a state of rest, like the walls of the vagina for instance, but that air is admitted into the middle ear during quiet respiration has been proved by experiment in Germany."

Nasal obstruction is also the cause of far more eye troubles than is generally supposed. Notably trachoma, pseudo-erysipelas of the lids, conjunctivitis, both hyalocratic and phlyctenular, keratitis, etc. Only recently the report of a remarkable case appeared in the New York Medical Record, of "Convergent squint corrected by Adams' modified operation for delected septum."

A brief resumé of this case is as follows: "A boy, aged twelve, fell from a height ten years before and struck on the bridge of his nose. From that time the boy's eye was turned to his nose, and the nose bent in an opposite direction. The strabismus was of so exaggerated a type that the cornea of the left eye seemed almost in contact with the inner canthus of the orbit. The voice was high-pitched and decidedly nasal in tone, giving evidence of a continual strain of the vocal muscles. He saw always double and experienced a feeling as if the affected side of his face were drawn to the opposite side. Examination showed that the left nostril was so much occluded by the delected septum that a probe could scarcely be passed. An opening was made under a twenty-per-cent solution of cocaine and the septum fractured by Adam's punch and replaced in position. The operation was painless and the loss of blood not more than a teaspoonful. Goodwillie's nasal tubes were introduced and the nose packed with cotton soaked with Dobell's solution; result, the hitherto hideously cross-eyed boy was converted into a smiling boy with straight eyes and a straight nose."

The next point to which I would ask your attention is one the importance of which in my opinion should not be overlooked, namely, the dependence which exists of almost all the functions of the larynx upon what I would term "pharyngeal competency." I regard the relations of the pharynx to the larynx in almost the same light as I do the driving wheel of an engine to the engine itself, or, to speak more plainly, I believe that the pharynx is the great lubricator of the larynx, which almost absolutely controls the clearness of the voice. The majority of aphonic cases are in my opinion
produced by pharyngeal incompetency, and this in turn by nasal incompetency, and therefore it is a matter of continual surprise to me that the profession seem to attach so little importance to those ever exerting organs, the pharyngeal glands.

Why do they always wait for a cavity to form in the lungs before attempting to account for the origin of the mass of sputa which has been pouring out ever since the cough began? It will not be disputed that the causes of a cough are many and various, and are by no means confined to acute or chronic inflammation of the lungs, pleura or bronchi. Is it not then reasonable that we should not, as heretofore, wait for a cough to become loose, as the expression goes, while the larynx, bronchi, and lung tissues are becoming daily more disorganized, but rather to exert every effort to cut off the early source of the discharge, viz., in the nose and nasopharynx.

I now reach the most important part of this paper, viz: How nasal obstruction and occlusion should best be relieved. On account of the great density of the tissues the lumen of the nostril can only be restored by the free use of the knife, saw, or galvano-cautery, the punch, chisel, wire snare or chemical acid, and the forcible removal of all obstructions, be they bony, cartilaginous or membranous. In my hands the nasal trephine driven by the C. & C., or challenge motor, has proved of invaluable assistance. Next to these I have used Dr. Bosworth's nasal saws and the galvano-cautery itself, or the hot wire snare. Many of the growths, however, are indurated in character, and having a bony substratum, their total removal becomes a matter of repeated attempts, and success is only then achieved by the aid of the most powerful and effective appliances.

In conclusion, it is not necessary for me to say more than that experience has taught me that nothing but good results come from the restoration of the lumen of the nostrils to their normal caliber, as shown by cases published in The Journal of the American Medical Association, September 19, 1890, and the Transactions of the South Carolina Medical Association, September 23, 1889, in which patients who had not only been subject to an unusual amount of coryza, but who showed all the symptoms of the ill effects of obstructed nostrils, difficult respiration, etc., from adenoid hypertrophy in the vault of the pharynx, eechondromata, etc., passed for months and years after the removal of such growths with material if not complete relief from the recurrence of the nasopharyngeal inflammation.—W. Peyre Porcher, M. D., in Journal American Medical Association.

Common Errors and Fallacies in the Treatment of Children.—Cheadle (Practitioner, July, 1891) writes that the chief points with regard to which faulty practices prevail are the following:

1. The sudden weaning of infants onto fresh cow's milk and water. The large curds of cow's milk are often beyond the feeble digestive power of the infant. The undissolved clots, under favorable conditions of heat and moisture, ferment and set up colic, vomiting, or diarrhea. Boiled milk with barley-water seems to be much more readily digested. In the case of very delicate children the milk should always be peptonized at first.

2. Insufficient gross amount of nutritive material. For example, a child is found unable to digest a mixture of cow's milk stronger than one in four. The capacity of the stomach, however, is limited, and it is impossible for it to take a sufficient quantity of this mixture to supply the material required for growth and nutrition. The difficulty may be overcome by adding some cream or perhaps some of Valentine's meat juice.

3. The use of food deficient in fat. This is an element of especial importance in the food of children, but it is almost wholly wanting in most artificial foods, and is deficient in most condensed milk.

4. The use of food deficient in proteid. Most artificial foods are lacking also in nitrogenous matter. Children deprived of these two elements are often large and fat, but are anemic, flabby, and rachitic.

5. The use of diet deficient in antiscorbutic elements. This is a point that is frequently overlooked. All condensed foods, farinaceous foods, and dry artificial foods are lacking in this regard, and should be supplemented by some fresh element.

6. The prolonged use of artificially digested foods. These preparations do excellent service in the case of children just weaned, or with small power of digested cow's milk. If they are continued for months, the power of digestion becomes seriously impaired, nutrition falls off, and the child becomes anemic and rachitic.

In the management of diarrhea numerous errors are prevalent, one of the most common and dangerous, perhaps, being the idea that a moderate amount of diarrhea is beneficial. So far from diarrhea being a safeguard against convulsions, it is precisely those children who have been reduced by diarrhea and vomiting who are most liable to them. Young children bear purging badly. A diarrhea which begins moderately is apt to develop dangerous proportions in a short period, and reach a point beyond control of medicine. The younger the
child the greater the importance of getting a diarrhea quickly under control. As regards food, give nothing that is not sterilized, nothing that is not predigested or easily digested. Astringents are useless in the acute stage, especially the vegetable astringents. Opium is essential in severe cases, even in young children. Gray powder and Dover's powder in small and repeated doses should be given if there is vomiting. The most efficient remedies are bismuth in full doses with small doses of opium.

In the treatment of chronic constipation in children, as a rule, three devices only seem to be adopted: (1) The administration of more or less active purgatives from time to time, the remedy being repeated as often as the bowels become confined again. (2) The use of enemata, sometimes regularly. (3) The inclusion in the diet of coarse foods and fruit, oatmeal, cabbage, prunes, figs, and the like. If the constipation is chronic, and hence habitual, it can not be cured by spasmodic efforts; but that is the criticism upon the treatment described. In most cases a drug is required, the constant daily use of some mild laxative being essential to ultimate success. Treatment must be continuous. Spasmodic, intermittent over-treatment will fail.

Night-terrors occur usually, but not invariably, in delicate neurotic children. The direct cause is usually undue stimulation of the brain, or of the imagination, by exciting stories, unkind treatment, a visit to the zoological garden, or over-pressure at school. By far the most common cause, the author believes, is constipation, often slight but persistent, the stools being hard and dry and usually of light color. The error in the management of these cases is the use of sedative treatment, the constipation being neglected. The neurotic element alone being recognized, bromides are prescribed, often with good effect for the time. The cause being allowed to remain, the relief is in many instances temporary.

Among the drugs most heedlessly used at the present day are those which have the property of reducing bodily temperature, such as aconite, antipyrine, and antifebrin. These are powerful drugs, and are too readily resorted to. Pyrexia is a symptom, not the cause or essence of disease. Yet the temptation to reduce the temperature is strong. It must be remembered, however, that in addition to their antipyretic power these drugs have other active properties. They are especially cardiac depressants. In many of the diseases in which they are used the danger lies not in the pyrexia, but in heart failure. High pyrexia is an element of danger, but is not the sole danger. This is especially true of pneumonia, and the results of decided antipyretic treatment of that disease has not been favorable. Children do not bear such treatment as well as adults. The mere forcing down of temperature by means of antipyretic drugs is futile as a means of curing the disorder which gives rise to the febrile state, and is besides often dangerous.

One of the most universal mistakes, although perhaps not one of the most serious, is that of relying largely or chiefly upon drugs in the treatment of diseases of defective nutrition. Children are apt to be dosed with cod-liver oil and other drugs without regard to the condition of their digestive organs. A delicate child is drenched with these drugs because it has a poor appetite, is ill-nourished, and anemic. The tongue is coated and the bowels confined, and the child is receiving improper food. Here the chief cause of the anemia and defective nutrition is the disordered state of the functions of digestion and absorption. A few doses of calomel, followed by a tonic with a mild saline laxative and judicious feeding, will do far more good than cod-liver-oil, iron, and hypophosphites. They are most valuable drugs in their place, but in these states of disorder, function, by intensifying digestive difficulty and impairing appetite, they do more harm than good. In rickets far too much reliance is placed upon drugs to the exclusion of milk, cream, meat juice, sunlight, and fresh air.

The cruel and useless practice of swabbing out the throat with caustic applications in diphtheria has almost died out, but this method of applying astringents and solvents still survives. After long experience and observation the author unhesitatingly condemns the practice as injurious. Such applications probably do more harm than good, while the terror, excitement, heart-strain, and physical exhaustion are conditions most inimical in a disease tending to death by asthenia.

Other errors in the treatment are briefly mentioned, such as oppressive poulticing of the chest in pneumonia; the administration of emetics in diphtheritic group, which is utterly ineffectual except to exhaust and depress the patient; their frequent repetition in bronchitis and whooping cough when there is no extreme mucous obstruction of the air-passages to justify it, and the too frequent purging of rickety children.—Med. and Surg. Rep.

The Therapeutic Use of Extracts of Animal Tissues.—The persistence and ingenuity shown by Dr. Brown-Séquard in his study of physiological effects of the juices obtained from the testicles and other glands of the bodies compels attention and interest. It
seems to have been quite well proved that the injections of testicular juice have no such "dynamogenic" power as was at first alleged. That this and other secretions, however, have no physiological influence is certainly improbable, and, according to Brown-Séquard and his co-workers, is positively untrue. In an article on The Action of Liquid Extracts Obtained from Different Organs, by Drs. Brown Séquard and D'Arsonval (Archives de Physiologie, 1891, No. 3), evidence of this belief is presented, and the technique of preparing and using the extracts is described. These authors assert that each gland of the body has two functions—one, that of secreting a substance from the blood; the other, that of supplying to the blood some needed constituent. It is this latter substance which it is proposed to obtain and use therapeutically. It is stated that the secretions themselves contain some of the dynamogenic or other substance required by the organism. In illustration the extraordinary fact is cited (p. 492) of a young physician who injected hypodermically some of his own sperm into his invalid wife's tissues. Her strength improved, and after four injections she was well. This is truly an extraordinary method of fulfilling the conjugal relations, but they do rude things in France.

The authors quoted give a number of illustrations to show that injections of the fluid of certain glands relieves symptoms caused by extirpating those glands. Thus, in the case of a dog suffering from the effects of the total removal of the thyroid, the symptoms were relieved by the injection of the juice of the thyroid. A total extirpation of the pancreas causes, it is said, diabetes, but if a small part of the gland is left this accident does not occur; and this is thought to be due to the so-called external or extrinsic action of the gland upon the blood.

A wide therapeutic field opens before the scientific imagination if the views suggested above are true. Thus, in myxedema, injections of the thyroid juice should be used in Addison's disease, the juice of the supra-renal capsules; in diabetes, the pancreatic juice; in leukocytoma, the juice of the thyroid glands, spleen, and medulla of bones; in muscular weakness, the muscle juice.

The injection of these juices, however, unfiltered and unsterilized is not free from danger, the testicular and ovarian juices alone excepted. Other juices are liable to cause death from septicemia.

In order to render injections aseptic and harmless, our authors submit the fluid to a pressure of CO₂, of forty atmospheres, and then pass it through a specially constructed filter.

Bacteriological tests by MM. Straus and Gambaiea show that the fluid now contains no micro-organisms, and experimental tests show that its use causes no accidents.

The juices are extracted with glycerine, and, after they have been treated so as to be made innocuous, are kept in sterilized flasks. According to our authors over fifteen thousand injections have been made by various physicians in Paris. With such a large experience it is unfortunate that no reports of definite therapeutic results are yet furnished. We trust that these will come later.—Medical Record.

The Hypnotic Action of Urethane, Sulphonial, and Paraldehyde, Clinically Considered.—Dr. T. Sydney Short, in the Birmingham Medical Review, gives the following summary of his study:

Age and Sex. The extreme ages of the patients in the list were 14 and 59 years, and of the 26 cases, 20 were males and 6 females. I could not see that the age or sex affected the action of the drugs in any way.

Disease. Here it was evident that the drugs had little effect upon cases of sleeplessness due to pain; in the case of thoracic tumor, however, where pain, but not very severe pain, was present, the patient stated that he was certainly easier after the draught containing grs. xxx of sulphonial. On the other hand, in the case of thoracic aneurism, where again the pain was not very severe, the same drug in doses of from grs. x-xx had no effect whatever. Five out of the seven cases of heart disease were greatly relieved, one had a little sleep, but the seventh was not much benefited. In the cases of bronchitis with cardiac failure, they gave good or fair nights, and will probably prove to be most useful in this class of case where opium is contra-indicated. In one of the cases of chorea, sulphonial in gr. xx doses acted most satisfactorily; better, I think, than the same amount of chloral would have done, although of course, it is impossible to be sure of this. In the other case of chorea, neither the urethane nor sulphonial gave more than a few hours' sleep at a time. In the cases of convalescence after pneumonia and enteric fever, all three drugs proved of great service; after the first good sleep no further dose was required. It appeared as if the bad habit of not sleeping had been broken.

Advent of Sleep. The times at which sleep ensued were so various that it is not easy to draw any definite conclusions from them. Ten minutes on the one hand, and six or seven hours on the other seemed to be the extreme limits. Both urethane and paraldehyde have
probably a more rapid action than sulphonal, but not in my cases to the extent usually considered, for sulphonal in 5 ss. doses produced sleep in a few minutes on one occasion, and in fifteen minutes on as many as five occasions. The action of sulphonal may be deferred for some hours; on two occasions sleep did not occur for six or seven hours, and in several cases the sleep seemed better the night after than on the occasion of the first dose, even when only one was given, but I do not remember any occasion on which no sleep at all was enjoyed on the night of administration, and a good or fair night the next, without a repetition of the draught.

**Duration and Character of Sleep.** In the greater number of cases where sleep was produced it was good in quality while it lasted. If the patient had been wandering or talking much in disturbed sleep for several nights before the drug was given, the sleep following the draught seemed more likely to be accompanied by occasional wandering than when the drug was given for complete absence of sleep with rational wakefulness. It seemed to me that slight wandering was more likely to occur after sulphonal than after either of the other drugs; or, to put it in another way, that after urethane and paraldehyde the patient might wake up for a few minutes and then drop off to sleep again quietly, whereas after sulphonal the wakeful intervals seemed to be replaced by wandering intervals, followed again by sleep of a sounder nature. I thought that sulphonal stupefied the patient more than paraldehyde, and certainly more than urethane; and in one case the patient, after grs. xxx of sulphonal, seemed inclined to wander and talk nonsense before he went to sleep at all.

**After Effects.** In nearly every case in which any effect was produced, drowsiness ensued the morning after the drug had been taken. The feeling of drowsiness was most powerful after sulphonal, and in fact often produced good sleep during a large portion of the next day. Slight headache was produced in a fair proportion of the cases, and some amount of giddiness in a few only. Following the moderate doses prescribed, no really disagreeable consequences were experienced. In two cases skin eruptions were seen; these have already been referred to. It is reasonable to conclude that they were actually caused by the drug. In one case rashes appeared both after paraldehyde and after sulphonal; in the other, after sulphonal.

**General Effects.** I can not point to any derangement of respiration, circulation, or appetite as a result of the drugs administered. If any alteration did occur in the respiration or circulation, it was not noticeable on the ordinary ward charts, and no symptoms occurred to suggest it. No case of cyanosis was seen after the administration of sulphonal.

I think the manner in which the chosen drug is given is important. The best results were those in the cases where sleep speedily ensued, and slight disturbances such as those unavoidable in a large ward were sufficient to prevent the approach of sleep in several instances. On every occasion, as far as it was possible, the patient was prepared both bodily and mentally for a good night’s rest; the last day medicine and the last food had been given, the pillows and bedclothes rearranged, and the spit-cup or other toilet requisite placed ready, so that he need not be disturbed, and he was told to remain quite still after the draught. Quietness of this nature can be more easily insured in private than in hospital practice, and on that account the drugs have a better chance in private than under the more or less disturbing influences of a hospital ward.

In conclusion, I think that this brief article, although not sufficiently extended to prove more than a few points, and subject, as all like papers will be, to fallacies such as that of the expectation of sleep on the part of the patient, yet will tend, I think, to strengthen the belief that, if given in suitable cases, in urethane, sulphonal, and paraldehyde we have three most useful and valuable drugs.—*Medical and Surgical Reporter.*

**Amputation of the Pregnant Uterus at Term, with Intra-Peritoneal Treatment of Stump.**—In the *Lancet* of November 29, 1890, was published an article in which I reported three successful cases of supra-vaginal amputation of the uterus for fibromata, with separate ligation of the vessels and intra-peritoneal treatment of stump. Since that article was written I have performed the same operation once more, also successfully, these four cases being the only ones in which I have practiced the operation. On March 8th of this year an opportunity occurred of applying the same method of operation to a pregnant uterus at term.

A Fellah woman, primipara, aged twenty-three, was admitted at noon, having been in labor one hundred hours. She was completely collapsed, but conscious, and her pulse easily felt. Her pelvis was osteomalacic, and the rami of the pubis so approximated that it was with difficulty that three fingers were introduced. The membranes had ruptured three days previously, and the head was jammed on the pelvis. The only possible method was by an abdominal section, and though the chance
of recovery was minimal, she elected to take that chance. At 2 p.m. she was chloroformed, and the following operation performed. The abdominal walls were incised up to two inches above the umbilicus. The uterus was made to protrude, and turned to the right. This brought into view the huge vessels of the left broad ligament stretched on the distended uterus, and a closed artery forceps was easily passed under them, piercing the broad ligament and raising the vessels from the uterus. One handle of the artery forceps was then passed beneath them, and the two handles were held by an assistant ready to be clamped when required. The uterus was then turned to the left and the vessels of the right broad ligament similarly treated. The placenta was readily found at the top of the uterus, and the uterine wall incised below its attachment. The opening in the uterus was enlarged with the fingers, and the child, which had been for a long time dead, was easily removed, the artery forceps holding the vessels of the broad ligament being at the same moment clamped. Some two or three ounces of blood escaped from the uterine cavity. The uterus was then cut across with scissors a little above the reflection of the peritoneum on to the bladder. No bleeding occurred, except as the uterine arteries and veins on either side were cut across, they being at once seized with forceps. The stump of the uterus was washed out with water, draining through the vagina. The vessels of the two broad ligaments, already clamped, were separated one by one and tied with silk, as also were the uterine vessels. The edges of the stump were then sewn together with a continuous catgut suture, and the peritoneum united over it with a continuous Lembert silk suture. The peritoneal cavity was washed clean with sterilized water, a large glass drain inserted, and the abdominal wound closed. The whole operation occupied twenty-five minutes. The patient revived for a few hours after the operation, then sank gradually, and died at seven next morning.

Remarks: In spite of the fatal result, I think operative interference was not only justifiable, but a duty. The operation itself possesses various advantages; it is as easy of execution as an ordinary ovariotomy; there is no possible fear of hemorrhage at the time of operation, except from the slipping of a clamp, and the chance of subsequent bleeding is rendered minimal, as each vessel is ligatured separately. The stump is perfect, being entirely covered with peritoneum, and the peritoneal cavity is entirely closed except for the drainage-tube, which I think might be omitted. As regards the child, its nutrition is in no way interfered with, as the circulation is carried on normally until the moment when the uterus is opened. The preliminary fixing of the clamps round the vessels of the broad ligaments is not absolutely necessary, as generally there is but little bleeding from the torn uterus, but as a matter of caution I think it advisable.—Mr. H. M. Milton, in London Lancet.

The Neurotic Character of Influenza. Dr. Julius Althaus, in a recent paper on the neurotic character of the grip, says that the great varieties observed in the symptoms of the feverish attack of grip have induced a number of observers to assume three different forms of the disease: the nervous, catarrhal, and gastric variety. The author is, however, convinced that these three forms have not any different pathological characters, but that influenza is always a true nervous fever, the symptoms of which only differ as far as localization of the grippo-toxine in different areas of the nervous system is concerned, and that the three forms just mentioned are perfectly arbitrary, all the symptoms of the feverish attack of influenza are referable to irritant poisoning of a definite center of the nervous system. Shortly after the visitation of influenza had commenced a number of patients complained of severe forms of neuralgia, loss of power, and a general break-up of the nervous system, which they attributed to an attack of grip. Some of these patients had been in perfect health before, while in others a neurotic pedigree or a previous syphilitic infection, or some other constitutional fault could be clearly traced, upon which the subsequent nervous affection had, as it were, been grafted.

In comparing those nervous troubles which may be met with after such diseases as diphtheria, typhoid fever, scarlatina, smallpox, measles, erysipelas, and malaria with those seen after influenza, it soon became evident that as a powerful etiological factor of all kinds and forms of nerve disease influenza stands facile princeps among all infectious fevers. The only distemper which approaches grip in this particular quality is syphilis, which may also give rise to the symptoms of almost any nervous disease. A still further analogy between these two infectious diseases is found in the circumstance that in both we may have a primary attack, secondary symptoms of a comparatively mild character soon afterward, and tertiary affections of a more dangerous and obstinate nature, affecting the organic structure of tissues, at a more remote period.

Grip also seems occasionally to revive an old syphilitic infection which has lain dormant for years, and thus indirectly to give rise to certain
diseases of the spinal cord which are known to occur habitually on a syphilitic base. In comparing the degree of virulence of the two poisons, however, the author has found that when the grippo-toxine attacks the structure of organs, it often does so with far greater ferocity and in a more ruthless manner than the syphilitic virus. The question then arose whether the chief reason of this peculiarity might not be found in the circumstance that the distemper itself, in its primary manifestations, is not so much an infectious catarrhal fever as has been generally assumed, as an infections nervous fever. A clinical survey of the symptoms of the feverish attack rendered this, prima facie, not unlikely, as many of them, such as headache, utter prostration of mental and bodily strength, delirium, coma, convulsions, etc., point unmistakably to the nervous system as their starting point; while, on the other hand, catarrh of the mucous membranes and pneumonia have been completely absent in a large proportion of cases. Indeed, many patients have had influenza badly without having once coughed or sneezed.

The author refers to the evidence of the value of vaccination and revaccination in lessening susceptibility to the disease, and recommends, should another outbreak seem imminent, that some provision be made for extensive revaccination of those exposed. — *Boston Med. and Surg. Journal.*

**Management of the Paroxysmal Inebriate.**—The assertion so confidently made by some to the effect that paroxysmal inebriety can be "radically cured" seems to me open to serious question. I have seen altogether too many "cured" cases relapse. There is little doubt, however, that under proper management the duration of the paroxysms can be materially shortened, and the intervals between them prolonged to such a degree that in the majority of cases the disease need no more interfere with a man's business than a gouty diathesis with occasional acute exacerbations. But to attain this result the condition must be treated as one of disease pure and simple, and the family and friends of the patient must heartily co-operate with the physicians in enforcing the necessary discipline. If the patient will himself co-operate, so much the better. The plan of treatment which has proven most effective in my own hands is as follows: The patient is put to bed and kept there for three or four days under the constant care of a nurse; if the patient be allowed to go about he does not recover physical tone as soon, and if he be left alone any length of time the fits of mental depression into which he is certain to fall greatly retard his recovery. Alcoholic liquor in every form is withheld from the first. Hot broth is given every hour, and hot milk at the usual meal times. Strichnia (from 1/120 grain of the sulphate) is given every hour, and in case the heart acts feebly or the kidneys are sluggish it is combined with 1/3 grain of digitalins. At night a sedative is given subcutaneously. Terchloread of gold and sodium (1/3 grain in thirty minims of water) has seemed to act kindly—more so than preparations of opium, either alone or combined with atropia or hyoscyamium, or those mixtures containing chloral or bromides. Coffee, hot, and without milk or sugar, is allowed if the patient cares for it. Irregularities of the stomach and sluggish action of the chylloptic system are corrected with small doses of calomel (1/15 grain three to six times a day), combined with ipecac and soda. After the third day the patient is allowed to sit up, and easily digested solid food, such as rare beefsteak, etc., is added to his diet. From the fifth to the eighth day the nurse can usually be dismissed, and the patient returns to his business free from the craving for liquor for the time being. I add the qualification advisedly, for overwork, or overwork, or prolonged privation of sleep, or any other cause which lowers the reserve of nerve force below a given point, will occasion a return of the craving, and with this craving comes the delusion of dipsomania, viz., that, since he is cured, he can take one glass and then stop. He takes it, but he doesn't stop. As a precaution, after the patient returns to his usual avocation, it is just as well to have him come to the office first daily, then every other day for a week or so, for his hypodermic of terechloread of gold. Every pains should be taken to impress both the patient and his family with the necessity of avoiding those causes which in his case seem to determine the attack, and of coming to the physician when the prodromata (most prominent among which are indigestion and insomnia) first appear. By taking these precautions, patients often go two years, and even longer, without a relapse. To make a long story short, dipsomania is one of the grave manifestations of nervous exhaustion. The principles that underlie its successful treatment are the same that underlie the treatment of other extreme forms of neurasthenia, viz., rest, forced feeding, and tonics, with proper care after recovery to forestall a recurrence of the attack. — *Dr. L. B. Tuckerman, Medical Record.*

**Laparotomy in Chronic Peritonitis.**—Of recent years surgical interference has done much in the treatment of chronic tuberculous peritonitis, and the following case recorded by
Henoch may clear up some of the difficulties in connection with the question. The patient, a girl four years old, was admitted into the Berlin Charité. She was of healthy family, though a brother was said to suffer from "disease of the bone" and "glands." Shortly before Christmas of last year the patient fell down stairs; how she fell was not exactly known, the child herself stating it was on her face and abdomen. Shortly after this accident a gradually increasing swelling of the abdomen developed; and the patient was admitted early in February. On examination she had the appearance of being in excellent health and very well nourished. There was extensive ascites with enormous distension of the abdomen. No disease of the liver could be made out; the urine somewhat small in quantity, was normal. Fever was absent. It was noted that tenderness of the abdomen was not present, either spontaneously or on pressure. In the left pleural cavity an effusion reached up to the angle of the scapula; marked dulness was here made out and the breathing greatly weakened. The question to be decided was whether it was tuberculosis of the peritoneum or simple chronic peritonitis. The general appearance of the child pointed to the latter, which recent observations show is not so rare as was at one time believed. And this diagnosis Henoch inclined to, notwithstanding the presence of a pleural effusion, which, he says, may complicate simple peritonitis, while on the other hand he holds that abdominal tuberculosis may run its course in children without involving the respiratory organs. Two days after admission paracentesis was performed, and a large quantity of greenish-yellow albuminous fluid removed. Koch's tuberculin was injected and gave no action. While the pleural exudation slowly became absorbed, and eventually disappeared, the abdomen rapidly refilled. Repeated tapings were performed only to become again necessary in a few days; and eventually laparotomy was decided upon. This was done by Bardelben, when there was discovered a granular condition of the parietal peritoneum in all directions, with grayish-red nodules, closely resembling tubercles; and it was thought that the condition was one of tuberculous peritonitis. A fresh preparation examined microscopically contained however no characters of tubercle, although the naked eye appearance was suggestive. The course was altogether favorable; there was no fever, the wound healed readily, and in a short time the child was well. Two months after the operation the patient remained free from any return of the fluid, and looked in excellent health. Laparotomy for tuberculous peritonitis has been practiced since 1884, with astonishing results. The explanation of this success is indeed difficult, and beyond the suggestions that the influence of light may be a factor, or that a diffuse adhesion of the peritoneal surfaces takes place, no one has been bold enough to suggest a theory. Henoch says the principal question is whether all cases which have been treated successfully were of a tuberculous nature or not. In a recent dissertation Philipp has collected 130 laparotomies for tuberculous peritonitis. Of these only 7 were in children between two and ten years of age. Then comes a greater number, 30, between ten and twenty years of age; all the others being adults, and the majority women. Now, chronic peritonitis in women is not infrequent, and some gynecologists believe it is usually non-tuberculous, being in fact, simple chronic peritonitis with the formation of fibroid nodules upon the peritoneum. Of this nature was the case recorded; and Henoch, while not denying a favorable result in genuine tuberculous, holds that the greater majority of the cases published are not tuberculous but chronic peritonitis, with deposits which appear similar to tubercle, but on microscopic examination are really simple inflammatory products.—Berlin Klin. Wochenscr.

**True or False Argyria.—** A remarkable case of supposed argyria was shown to the London Post-graduate Class by Mr. Jonathan Hutchinson. The patient, a man of sixty-three, presented a tolerably uniform deep leaden color of his face, neck, ears, and scalp. The same tint extended over the whole trunk and limbs, but was much less marked on the covered parts. The mucous membranes of the eye and mouth were also deeply discolored. The color was everywhere exactly like that of lead, and the general appearance resembled that of a patient who had taken nitrate of silver in excess. It was not "bronzing" but "black-leading." One result of the discoloration was that all the hair follicles on the skin were made very conspicuous, as the tint was deepest just around their orifices. The same was seen very conspicuously on the palate, where all the gland orifices were picked out in black. Mr. Hutchinson brought the case forward as an example of a condition exactly resembling that of the deepest possible nitrate of silver staining which had yet been produced without any such cause. The man had always denied having ever taken the drug named. He had, however, at the last moment, and while before the class, remembered that, at least thirty years before the change in the color of his skin attracted attention, he had used for a year continuously a gargle which he was told contained nitrate of silver. Speculating on
the diagnosis, Mr. Hutchinson said the case in all its features exactly resembled nitrate of silver staining. The question was whether, either in the manner which the man himself suggested or some other way, nitrate of silver had been received into the system; or whether there was simulation of argyria under the influence of a totally different cause. If the man's own suggestion were accepted, we then had the remarkable fact that the coloration of the skin had not been noticed until a long period of years after its use. Mr. Hutchinson avowed his own belief that the case was one of argyria. He could not conceive that any other cause would so closely simulate its appearances. *British Medical Journal.*

**Tuberculin.**—The publication of Koch's last manifesto concerning tuberculin has called forth several opinions of this substance, and criticisms of Koch's work. Two of the more important of these, by Klebs and Hueppe, form the basis of an editorial the in *Lancet* of November 14th.

Prof. Klebs publishes a statement in anticipation of a more detailed work, in which he appears in the peculiar position of defending tuberculin against its own discoverer. Koch appears to believe that the injurious effects following large doses of tuberculin are due to the substance itself; whereas Klebs does not think so, and accounts for the fact that the same substance which acts curatively in animals produces injurious symptoms in man, by the explanation that animals are immune to the noxious elements of crude tuberculin. These injurious substances are no doubt alkaloidal in nature, and it is from these substances that Klebs has been trying to rid tuberculin. He has succeeded in extracting from the purified tuberculin of Koch the active substance without much admixture of these alkaloidal substances, and proposes to call it "tuberculo-cidin." It is an albumose, and it, or its combinations with tannin or other participants, has an undoubtedly effect in tuberculosiis, never exciting fever, and producing marked improvement. Hectic and night sweats disappear; signs of catarrhal process in the lungs, together with cough and expectoration rapidly diminish; appetite and body-weight increase. The bacilli in the sputum become granular and less and less capable of receiving the staining reagents, and finally disappear.

Apparentlly neither Koch nor Klebs have taken any notice of the work in the same direction by Cheyne and Hunter, published last summer; in fact, Koch's paper has been widely criticised as containing a slight on all other bacteriologists.

Hueppe, among others, strongly protests against these "communications" of Koch's, and asserts that the latest of them contains nothing that had not been independently shown by others, while it does not go so far even as their work has in the isolation of the active principle of tuberculin. He quotes Professor Koch's earlier criticisms of M. Pasteur against his own present methods of publication of his researches. And he might have added that no work of the French savant was ever produced with the air of mystery that did so much harm in the first announcements upon tuberculin. Finally, Dr. Hueppe deals severely with the accusations brought by Prof. Koch against bacteriologist in general, and shows how ill-founded they are.—*Boston Med. and Surgical Journal.*

**Poisoning by Potassium Chlorate.**—The case of a shoemaker, aged eighteen, who died from the toxic effects of chlorate of potassium, is recorded by Dr. Länderer, of Berlin. Patient was ordered a gargle for tonsillitis, containing about half an ounce of the salt in a glass of warm water. He swallowed the whole in two drinks within half an hour. The first effects of the drugs were weariness, thirst, giddiness, followed rapidly by more alarming symptoms, arising presumably from the action of the salt upon the blood, namely, acute anemia, dyspnea, cyanosis, persistent vomiting of a greenish fluid, pain in the hypochondria and around the umbilicus, with icterus. Hepatic, splenic, and renal symptoms then set in. During seven days' illness the urine eliminated did not exceed 33 ounces. Albumen was present from beginning to end. From the third day epithelial casts were sparingly present, while methemoglobin casts were found in great numbers from the very first day, and disappeared gradually with the clearing of the urine. The spectroscopic examination of the filtered urine gave the methemoglobin spectrum. Länderer considers: (1) That the poisoning is simply the action of the drug, which produces changes in the physiological condition of the blood. (2) Acute nephritis is not necessarily present in all cases; but where the illness is protracted it is seldom absent, owing to the mechanical irritation of the renal epithelium. (3) The icterus is partly hematogenous. (4) The vomiting, constipation, etc., are probably due to the fine gastric ulcers produced by capillary emboli, formed by the methemoglobin clots. (5) The cyanosis is due to the insufficient arteriolization of the blood in the lung. (6) The best treatment in such cases within the first twenty-four hours after swallowing the salt would be venesection, followed by infusions of sodium chloride, or,
better still, transfusions of defibrinated blood. (7) Internally potassium chlorate should not be used, more especially in children. The quantity of the drug should be carefully limited in gargles, so that but small doses may be taken in case of accident.—Medical Press and Circular.

THE PURIFICATION OF SEWAGE.—Part I of the Supplementary Report of the Massachusetts State Board of Health on Water Supply and Sewerage has already been commented on in a previous number of the Journal. Part II deals with the important question of the means of rendering foul water innocuous, and consists chiefly in statements of results of experiments at Lawrence, under the direction of the distinguished engineer, Hiram F. Mills, member of the board, to which are appended reports of chemical and bacteriological investigations, and upon nitrification of filth.

The experiment station, a description of which is given, was established to determine the fundamental principles of filtration not previously known, and to learn what can practically be accomplished by filters made of some of the widely varying materials found in suitable localities for filtration areas. Thirty-two different filters were used, and the results, chemically and biologically, are most fully recorded.

The distinctive and essential differences between continuous and intermittent filtration are presented by alternately using one method, then the other, upon the same filter, with the same daily quantity of sewage. It is shown that the efficiency of intermittent filtration depends upon the process of nitrification, which is proved not to occur in continuous filtration. The conditions favorable to nitrification, its dependence upon nitrifying organisms, and the condition of the surface and degree of saturation of the filtering material are brought out by many examples, throwing much new light on the subject. It is shown that while nitrifying bacteria are necessary in producing nitrification, the process of complete nitrification of the organic matter of the sewage is one of complete destruction of other bacteria, and, it is presumed, of all disease germs. The process of purification of sewage by intermittent filtration is proved to be in no essential sense a straining process, but completed only when sewage passes down through a mass of coarse gravel in very slow motion, in extremely thin films over the surface of each stone, exposed to air, with the nitrifying bacteria which exist in the sewage attached to the surfaces of the stones. In intermittent filtration of water, only three hundred thousand gallons could be so far purified for six days in the week upon an acre as to cause the belief that the bacteria in it had been killed.

The results of experiments in cleaning sewage by chemical precipitation will be interesting to those towns where that is the best available solution of their sewage question.

The chemist and biologist add greatly to the value of the report in methods of analysis, in investigations into the nature of the changes which nitrogenous matter undergoes in the process of oxidation by filtration or chemical precipitation, and especially in accounts of means employed and results reached in bacteriological examinations. Among the microorganisms in sewage, twelve species of bacteria are described with full illustrations from photomicrographs. Some bacteria evidently may pass through filters of coarse sand, but probably not through very fine sand.

The experiment station, in co-operation with the chemical and biological laboratories, has been the means of settling or corroborating some theories hitherto in doubt, and the generalizations therefrom can not fail to be of great practical value.—Boston Med. and Surg. Journal.

A PECULIAR CASE OF POISONING.—At a meeting of the Society of the Alumni of Bellevue Hospital, New York, Dr. Seabrook described the following case: A woman, aged forty-seven, took a wreath which had been hanging for some months on a wall, and threw it into the fire. While it was burning she noticed some irritation in her throat. Within a day she began to suffer from general malaise and throat trouble. Membrane soon formed in the mouth and on the fauces, and later on there was infiltration of the mucous membrane of the genitals, and patches of eruption made their appearance on the palms where she had grasped the wreath. The membrane was grayish, and came away readily. The temperature never exceeded 102°. On the fourth day the eyes became affected. On the next day Dr. Seabrook saw her for the first time. A dense membrane then glued together the eyelids, and the lids to the eyeballs; but they could be separated. There was very little infiltration of the lids, but mostly on the lower part of the eyeball; and here the membrane was most firmly adherent. The membrane lasted only two days, but the eyes did badly nevertheless, and both corneae perforated. It was not known from whose grave the wreath had been removed, but there seems little reason to doubt that it must have been from that of a person who had died of diphtheria.—N. Y. Med. Jour.
Antidiaphoretics.—1. Camphoric acid has been used by Dr. Combemale (Jour. de Méd., March 1, 1891) as a diaphoretic, and has been found to diminish, almost with certainty, the exaggerated functional action of the sweat-glands, not having the great disadvantage of causing phenomena of delirium, nor, like aperic, does it produce free purgation.

2. Esericin is recommended by Prof. Combemale, of Lille, France (Gazette degli Ospitai, No. 51, 1891; Cincinnati Lancet Clinic, Aug. 29, 1891), as a remedy having a decided action in phthisical patients upon the exhausting sweats. It is also efficacious in the sweats of other intoxications and infections.

3. Hydrastis canadensis is found by Dr. Crane (Allg. Med. Zeitung, 1891; Cincinnati Lancet Clinic, Aug. 15, 1891) an efficient remedy in night-sweats. He tried the remedy in a case with hemoptysis, and noticed that the night-sweats did not come on as usual. He gave thirty minimi of the fluid extract, and always with complete success; and, what is more, the sweats kept off after the hydrastis had been omitted for three weeks. He met with similar good results in a number of other cases.

4. Ergot is praised by Da Costa in doses of 0,10 (1 gr.) three times daily.

5. Homatropine gromohydrate is used by Frommuller subcutaneously 0,005—0,003 at a dose.

6. Physostigmine is recommended in pill form 0,006 (1/100 gr.) per dose of the extract. Eserine, hydrobromate, sulphate, and salicylate are also employed, 0,001 (1/100 gr.) three to four times during the night.

7. Picotoxine has been used successfully by Caldwell, Senator, and Westbrook, 0,0012—0,003 (1/50 gr.) subcutaneously.

8. Tincture of belladonna is also employed externally. 4 grains (1 fl. 5) of the tincture to 30 grams (1 fl. 5) of water. (Radakow, Deutsche Med. Zeitung.)

9. Chloral hydrate is spoken of highly by Nicolai. Eight grains (2 5) of chloral hydrate dissolved in two glasses of water, and equal parts of this solution and brandy, may be sponged onto the body.

10. Sulfonal is regarded by Dr. Canteé (Gazzetta degli Ospitai, No. 54, 1891) as superior to camphor acid or the tartarate of sodium in the night-sweats of phthisical patients. It does not, however, yield constant results.—Med. and Surg. Reporter.

Mental Disease Following Influenza.—In the Deutsche Medicin Zeitung for September 3d and 7th there are references to various recent articles on mental disturbances following influenza. Two of these articles merely give an account of one or two isolated cases, but in the others there are records of more considerable numbers of patients who had developed a psychosis following on influenza. Some of those referred to by Dr. Jutrosinski were observed in Prof. Jolly's clinic in Strassburg. The conclusions of his paper are summarized as follows:

When mental disease is brought on by influenza in the great majority of cases the patients are of neurotic temperament. The attack may come on in any stage of the influenza, but there appears to be a preference for the period of convalescence. In the majority of cases the symptoms were those of melancholia and hypochondriasis. Neither sex is specially liable. Most cases occur between twenty and forty years of age. In the case of existing mental disease, influenza caused an aggravation in almost every instance.

With these statements may be compared the facts submitted by Dr. Miselbaum. He had patients of each sex, and of ages varying from sixteen to seventy. All of them had been for some time convalescent from the influenza attack, though suffering from lassitude and persistent sleeplessness. At the onset of the psychosis there was always acute delirium of variable duration, which gave place, except in two cases, to a melancholia lasting for at least a fortnight. With Kraepelin, he does not consider that influenza itself is sufficient to produce an insanity in a normal subject, but that there must always be other etiological factors. In any case influenza must be considered along with other specific fevers which have mental diseases among their sequelae.

Miselbaum mentions other nervous diseases which he had met with after influenza (intercostal and supra-orbital neuralgias, and long-continued sleeplessness). He advises special care in treatment and observation of cases during the period of lassitude following influenza. Boston Med. and Surg. Journal.

The Action of Strontium and its Salts. In a recent note presented to the Société de Biologie, J. V. Laborde (La Tribune Médicale, July 16, 1891) has given the results obtained by him from an experimental study of two salts of strontium, the orthophosphate and the bromide. The results corroborate those previously obtained and reported to the same society with regard to other salts of the same metal. Both these substances seem to act favorably on the general nutrition.

The strontium was advantageously given to dogs in the proportion of thirty grains of the metal to seventy grains of the orthophosphate...
per kilo (about two and a quarter pounds) per body weight. To a young and healthy dog, weighing twelve kilos (about twenty-seven pounds), were given during one hundred and eleven days twenty-four and three sixteenth ounces of the pure orthophosphate of strontium, with apparently no evil consequences. The animal was then killed by puncturing the medulla, and post-mortem examinations showed no lesions of the organs. The stomach, the liver, the intestines, the kidneys, and lungs were absolutely normal. As in previous observations, there was complete absence of tenia in the intestines of the animal, the cause of this being evident.

Finally, upon chemical analysis, traces only of the metal were found in the liver and the urine. One hundred grams, or fifteen hundred grains, of bone gave ten grains of the metal strontium. As the phosphate of strontium is a nutritive and assimilable mineral substance, it is thought that it will render great services, especially in dietetics.

The bromide of strontium seems to be more active than the preceding salt. Hypodermically administered, it produces complete anesthesia at the point of injection, accompanied with infiltration and edema. In about fifteen minutes, when the general system is affected, there are noticed diminution of the reflexes, tremors of the head, in the case of a guinea-pig, and a tendency to somnolence and stupor. In three or four hours these symptoms disappear, but the local paralysis, edema, and anesthesia at the point of injection remain for a longer time. While the reflexes or excito-motor functions are diminished or abolished, the action of the salt upon the cerebrum and upon the peripheral motor and sensory nerves is comparatively slight. To produce these symptoms large doses were administered.

Strontium bromide is certainly not very poisonous. For instance, to a dog weighing ten kilos (about twenty-two pounds) sixty grains of salt were given by the mouth. The animal vomited once, showed restlessness at first, and then went to sleep. With no other deleterious effects the dog entirely recovered. It appears, therefore, that the fundamental physiological actions of the last remedy are similar to those of the potassium salt, with the important practical difference that the first-named substance is less poisonous, and may be said to possess the activity of the potassium and the relative and absolute innocuousness of the metal strontium.

According to the author, and from the experimental evidence so far obtained, this salt should be given a trial in those cases where the use of bromide of potassium is indicated — \textit{Univ. Med. Magazine}.

\textbf{Jaundice.} — At the fourth Italian Congress of Internal Medicine, held in Rome in October, Prof. Patella in his report on jaundice proposed the following conclusions:

Neither the "hemafecal icterus" of Gubler, the "urobilin icterus of Gerhardt, nor the "biliogenin icterus" of Tessier can be sustained. Hematogenous icterus does not exist.

Nearly all the forms of jaundice seen clinically come under the hepatogenous form by resorption.

The mechanism of the production of some forms of icterus is very obscure—that is, the reasons why and where this biliary re-absorption takes place.

The physio-pathological conception of so-called catarrhal icterus, as maintained in the past, is no longer sufficient to explain the actual mechanism of its production.

The actual state of our knowledge of the bacteria of the intestinal canal and biliary passages does not authorize us to accept without reserve the infective origin of catarrhal icterus.

Chauflard's idea of its toxic origin—modified in accordance with the results of biologic chemistry and experimental studies on icterus—must be taken into serious consideration in catarrhal icterus, and especially in certain cases of infective jaundice.

Catarrhal icterus can be considered the first link of a chain which, starting from it, reaches to grave and lethal icterus. A plural etiology (a true multiplicity of pathogenic possibilities) must nowadays be given to infective jaundice.

The "morbic Weil," though belonging to this group on account of its clinical aspects, even in the absence of bacteriological or pathological demonstrations, merits, however, a special place as etiologically specific. Is it bacteric or toxic?

Our present knowledge of biliary infection is incomplete and imperfect. \textit{Boston Med. and Surg. Journal}.

\textbf{Excision of the Scapula.} — At a meeting of the Medico-Chirurgical Society of Bologna, on April 19th, the President, Professor Putti (\textit{Riforma Medica}, May 1, 1891), related two cases in which he had completely extirpated the scapula, leaving the other elements of the shoulder and arm intact. In both cases the greater part of the muscles covering the bones and portions of those attached to it were removed at the same time. In one of the cases (a man, aged forty-five, with osteo-sarcoma of the scapula) the operation had been performed two years previously, the patient dying fourteen months after it of acute enteritis colitis; the other (a woman with a myxomatons osteo-chon-
drosarcoma of the scapula, who was shown to the Society) had been operated on recently. In both cases, after the removal of the bone, an attempt had been made to form a new joint by placing the articular head of the humerus under the acromial end of the clavicle, and suturing the remains of the capsule to the portions of the excised muscles which were left behind. The deltoid was made to cover the new joint as closely as possible, and fixed in position with sutures. The new joint proved a success in each case, there being a fair amount of mobility and considerable muscular power. The man, indeed, had been able to resume the lighter part of his work as a farm laborer.

Professor Putti pointed out that the published statistics of excision of the scapula were for the most part misleading, inasmuch as they included cases of resection of larger or smaller portions of the bone as well as cases of complete resection.—British Medical Journal.

TREATMENT OF PRURITUS HEMALIS.—Corlett states that in the treatment of pruritus hemalis locally, resorcin has been found the most beneficial drug. It tides over the irresistible desire to scratch; its influence remains from two to five hours; and not infrequently it affords immunity for a whole night.

The following is the formula used:

Resorcin (Merck).............................. 31; Glycerin.............................. 30; Aqua........................................... ad 3 iv.

Sig: Apply.

Menthol has also been serviceable in this affection:

Menthol........................................ 10 p. c.; Glycerin.............................. 30; Aqua........................................... ad 3 iv.

Sig: Apply.

Ichthylol, although less agreeable to use, has been highly beneficial in a few cases:

Ichthylol ammon. sulph....................... 3-10 p.c.; Glycerin.............................. 30; Alcohol.............................. 30; Aqua........................................... ad 3 iv.

Sig: Apply.

These applications have been called palliative, yet it is not very uncommon to see cases of pruritus hemalis get well under their use. Change of climate seems to be the only curative means at our command; but as few patients are able to avail themselves of this, it must be of secondary importance. From the foregoing it will further appear that in selecting a climate, one not subject to sudden changes should be chosen. Warmth and humidity are also essential.—Jour. of Cutan. and Genito-Urin. Diseases.

Diuretin.—Kress, in a paper reviewing what has already been written on this drug, and describing in detail his own observations in a large number of cases, comes to the following conclusions: Diuretin is a true diuretic, increasing equally the fluid and solid constituents of the urine. Its action is due to a direct, unirritating influence upon the renal parenchyma; albumen does not appear in consequence of its action, and if already present in the urine its amount is not changed. The frequent favorable influence of the drug upon the organs of circulation is probably produced indirectly. The best results from its use are obtained in cases of acute and chronic diseases of the heart and kidneys, especially acute nephritis and uncomplicated valvular disease. Good effects may be expected in chronic nephritis and myocarditis, whereas in simple serous effusions, as in tuberculosis, the drug is of no use. Diuretin can be continued for a long time in large doses, two grains a day, without any alarming secondary effects. The continued administration of the drug in cases of the above-mentioned diseases does not decrease its diuretic action.

A similar series of observations is recorded by Pfeffer, who strongly recommends diuretin, especially for cardiac dropsy and chronic renal disease. When compared with digitalis, however, diuretin is found inferior as a cardiac stimulant, while superior in its action on the kidneys. Pfeffer's conclusions in other respects resemble those of Kress.

FIVE CASES OF ECTOPIA PREGNANCY.—Foerster (Med. Monatschrift, November, 1890) remarks that, notwithstanding the many contributions to this subject in recent times, there are still many things regarding it that are obscure. Especially is this true in regard to its etiology. Even those who have had most experience with this condition are still in the dark in regard to important particulars. There are many cases that are so complicated by peritoneal adhesions that they present the greatest difficulties or are quite unsuitable for operation. The author agrees with those who believe that prior to rupture this condition is almost impossible of diagnosis. His experience includes five cases which have been seen within the last two years. Four of the patients were operated upon—two with a successful and two with a fatal result. The fifth patient died of hemorrhage, no operation having been attempted. The pains, which resemble labor pains in these cases, are regarded as an important factor in establishing the diagnosis. The atypical hemorrhages from the uterus should also excite suspicion of this condition, as has been observed.
by many authors. Other important diagnostic factors are the enlargement of the uterus, its mobility, the sense of its emptiness when the sound is passed, and the activity of the mammary glands; also the anemic condition of the patient, which is usually present. As to the operation in such cases, it should be performed as rapidly as possible, and it is doubtless well to leave a large quantity of hot water in the abdominal cavity to be absorbed, and thus take the place of the blood which has been lost.—Medical and Surgical Reporter.

Hemorrhage into the Spinal Cord.—Dr. Diller records the following instance of this disease: A laborer, aged fifty-one, of good habits, who had not had syphilis or rheumatism, one night soon after going to bed was seized with an excruciating pain in the region of the first lumbar vertebra. The pain passed down his thighs, and was so intense that he got up and walked about the room; he then sat down and put his feet in hot water. At this time there was nausea but no vomiting. Soon his feet became numb, and on trying to stand he found diminished power in his legs; in a few minutes more there was entire loss of sensation and motion in both legs. The pain ceased in about twenty minutes from the onset. There was at no time any affection of consciousness, and no loss of motion or of sensation above the waist. Next morning voluntary control over bladder and rectum was found to have been lost. In the course of three weeks some return of voluntary power in the left foot was noticed, and the improvement continued steadily up to the time of publication. The writer discusses the differential diagnosis, and decides in favor of hemorrhage into the lower part of the dorsal region of the cord.—New York Medical Record.

New View of Chlorosis.—A remarkable work on chlorosis has been published by Dr. Frederick Scholz, of Bremen. This observer does not regard the deficiency of iron or hemoglobin, nor even that of the red corpuscles, as the primary affection, but states that contraction of the vessels is always present, and contends that this is not to be regarded as a complication but as the primary condition, which is followed by the morbid blood changes. Dr. Scholz thinks the vessels are too full and the blood abnormally serous. Long ago he was impressed by the cold and livid condition of the skin in anemic subjects, and he was led by this to employ hot baths together with gentle friction, with the object of improving the vitality and nutrition by acting on the skin. The success of his first attempts was so marked that he has persevered in this line of treatment. Hot baths diminish the plethora by relaxing the tension of the vascular system, which is high, quickening the circulation and thus relieving the palpitation, dyspnea, and other symptoms. The Lancet.

Palliative Operations in Cases of Enlarged Prostate.—Vignard (Annuel des Malad. des Org. Génito-urine, vol. x, 1891; Centralbl. f. Chir., No. 10, 1891) believes that in the very great majority of cases of hypertrophy of the prostate, bloodless therapeutic measures are sufficient. He would recommend surgical intervention—that is, puncture of the bladder or supra-pubic cystotomy, or the boutonnière operation—only in cases of retention where catheterization is impossible, and where septic urine absolutely requires evacuation; in cases where great difficulty in passing the catheter is not relieved by permanent catheterization; and in cases of cystitis not relieved by careful and long-continued medication. In the first two instances the boutonnière operation is indicated, while where cystitis is present supra-pubic cystotomy should be practiced.—American Journal of Medical Science.

Surgery of the Brain.—In a memoir on Surgical Intervention in Lesions of the Brain, Dr. Laurent believes he can claim: (1) That success follows operation in a certain number of brain lesions (2) Hydrocephalus can, however, be regarded as incurable in the great majority of cases. (3) Cerebral abscess is frequently cured by operation. (4) Traumatic epilepsy in general justifies trepanning. This is shown to be less effective in Jacksonian epilepsy. (5) As regards tumors, operation is scarcely indicated excepting for those which are small, well defined, and superficially situated. (6) Excision is the treatment by choice for the encephalocoele of medium volume. As a general conclusion the author says surgical intervention applied to brain lesions can not ameliorate in a marked way, or cause to disappear, with rare exceptions, anything but those which are superficial and limited.—Le Scapel.

A New Remedy for Rheumatism.—According to the Lyon Medical, October 25, 1891, Dr. Betchine, of St. Petersburg, has made special studies in reference to Ephedra vulgaris, a plant much esteemed by Russian peasants for its anti-rheumatic qualities. The bark and the root the observer found efficacious in acute articular rheumatism with high fever. In chronic rheumatism its most favorable action was merely a slight temporary amelioration. Unless fever is present the drug is not specially useful.
AMEBIC DYSENTERY.

In these days of bacteriology, when a week scarcely goes by without chronicling the discovery of a new microbe, and when all infectious and contagious diseases are attributed to the ravages of these little vegetable organisms, it gives one something of a patriotic thrill to find that the humble animal organisms, the protozoa, are coming in for some of the credit of making miserable the life of man. The "ameba coli," which the microscopist had hitherto looked upon as a harmless sojourner in the big intestine, is now invested with the honor of producing the kind of dysentery which bears his name. Whether his claims to the honor will stand scientific test, or whether they will share the fate of the ameba grippii of two years ago, remains to be seen. In the mean time it would be well to read the monograph of Councilman and Laffleur (Johns Hopkins Hospital Reports, Volume II, fasc. 6-9), wherein these validity claims are maintained in a most painstaking and elaborate manner.

Amebic dysentery, say the authors, differs from ordinary catarrhal and diphtheritic varieties in a more chronic course, numerous intermissions and exacerbations, and the tendency to serious complications, particularly abscess of the liver. The stools contain less mucus than in ordinary catarrhal dysentery, and as a rule much less blood. "As a case becomes more chronic the stools no longer have a dysenteric character, but are of the consistence and appearance of thin gruel. The reaction is generally alkaline. Frequently attacks of constipation alternate with diarrheah."

"The amebe are found in all varieties of the stools and at all periods of the disease, being most abundantly in the exacerbations. They may be present after the evacuations have become normal." Observations made upon twelve cases of catarrhal and three of diphtheritic dysentery failed to find the organism. "Tenesmus was absent in many of the cases, and the fever as a rule was slight and in many instances transient."

A complication besides abscess of the liver was pulmonary abscesses, in which it is said the sputa are almost pathognomic. Amebe are present in it. They are constantly found in liver abscess due to this form of dysentery. When perforation occurs the ulcer is said to be characterized by the entire absence of the products of purulent inflammation. The amebe are found in all the coats of the intestine and sometimes in the peritoneal cavity.

The life history of the parasite is not yet worked out. It is supposed to be imbied in drinking water.

Though some of the cases run a mild course, the disease is generally severe and the mortality high.

This looks like an important contribution to etiological medicine. If true, it probably accounts for the spread and behavior of tropical or epidemic dysentery. The hygienic suggestions of the discovery are sublime.

ANTIKAMNIA.

Elsewhere in this issue is a communication from Dr. E. P. Easley, of New Albany, Ind., relative to the case of poisoning by antikamnia reported by him in The American Practitioner and News some months since. The report, together with our comments upon the same, has called forth some judicious comments from the medical press. Dr. Easley now gives a more
detailed report of the case as developed before the coroner’s jury, which lacks nothing of scientific fulness, except the possibly doubtful composition of the drug. His statements, based upon the incidents of the first case and his own experience in another, the unprejudiced reader will allow are well warranted. Dr. Easley says: “I submit that any drug which, given in two and one half times the normal dose, may produce death is an extremely dangerous medicine; and since antikamnia has done this without any extenuating circumstances, the profession should know it.”

Notes and Queries.

The Antikamnia Poisoning Case.

Editors American Practitioner and News:

The editor of the New York Medical Journal, in discussing the antikamnia poisoning case reported by me some time ago, remarks, as quoted by you in the current number of your journal: “It is difficult to connect the almost instantaneous and rapidly progressive poisoning above recorded with a dose no larger than that stated (twenty-four grains). The questions of idiosyncrasy, of possible undiscovered organic disease, of unknown quantities of the drug previously taken, with a sudden cumulative action, ... suggest themselves, and make it desirable that a full investigation should have been made.”

The woman may or may not have had an idiosyncrasy which made this drug in this dose fatal to her. That can not now be determined; but any organic disease is out of the question, as will appear later. The fatal dose was the only one of antikamnia ever taken by her, and was handed to her by a physician from his vest pocket, under the belief that it was a dose of four grains; hence there could have been no cumulative action.

A full investigation of the case was made by the coroner, Dr. Starr, at the instance of the husband. All the facts relating to the unfortunate affair, including the woman’s family history, were discovered, followed by a post-mortem examination, in which the brain and all the thoracic, abdominal, and pelvic viscera were carefully inspected. The verdict was, “Death the result of an overdose (twenty-four grains) of antikamnia, administered by mistake.”

So much for the antikamnia poisoning case. I have “set down naught in malice”—merely related the facts as they existed. I am not prejudiced against antikamnia. I know, as every one does who has administered it, that it has great analgesic power. But I submit that any drug which, given in two and one half times the usual dose, may produce death, is an extremely dangerous medicine; and since antikamnia has done this without any extenuating circumstances, the profession should know it. I have seen dangerous toxic symptoms follow a single dose of five grains. My third-door neighbor, a feeble woman of sixty, was given five grains by her daughter. She soon after fell from her chair unconscious. I saw her in a very short time, and thought her moribund—feeble pulse, cold extremities; hands, face, and eyelids cyanosed. She was given brandy hypodermically at first, and soon afterward by the mouth. Her recovery was prompt.

A word now in reference to antifebrin. Physicians and druggists are almost unanimous in their acceptance of the identity of this and antikamnia, and their toxic symptoms are certainly identical. I have observed cyanosis and active delirium to follow the administration of two five-grain doses of the acetanilide to a robust woman, and cyanosis develop after a single dose of three and one half grains to a sixteen year-old girl.

E. P. EASLEY, M. D.

New Albany, Ind., January 11, 1892.

The New Koch Institute.—The Berlin Society for Public Medicine held its first autumn meeting on October 26th, in the Koch Institute for Infectious Diseases, under the chairmanship of the Director of the Charité, Dr. Spinola. In addressing the meeting Dr. Spinola pointed out that the new Institute had appeared sufficiently important to the public health for the committee to make it desirable that the members should have an opportunity of inspecting it. Dr. Pfeiffer, the Director of the Scientific Department of the Institute, then gave an address, illustrated by means of elec-
trical projections. He said the aim of the Institute was not limited to the study of tuberculosis, but to the discovery of effectual means of treating all infective diseases. Most excitors of disease belonged to the class of bacteria, of which many were already known. But there were a number of diseases of which the exciter was still unknown. These diseases would be systematically investigated, and it was to be hoped that unexpected discoveries would be made in regard to them. When we knew the excitors of these diseases, it would be the next aim to discover their vital conditions. It must also be determined through what channels they entered the system and how they spread themselves. If they succeeded in bringing about the still mysterious immunity, a step in advance would have been made, and here also the subject was one not entirely conjectural.

Cure was not always brought about by way of immunity; sometimes spontaneous cure of tuberculosis took place. When substances were employed which in the animal organism excited the peculiar changes that led to spontaneous cure, one might hope for the cure in the human subject also. Tuberculin was undoubtedly such a substance, and it was being subjected to still further investigation. The Institute had lofty aim, and if Koch's discoveries resulted in no more than its foundation, his labors had been sufficiently blessed.—Boston Med. and Surg. Journal.

DANGEROUS DABBLING WITH MEDICINE.—The remedies which are advocated in the columns addressed to correspondents in certain lay papers frequently provoke a smile, but not uncommonly they suggest very serious considerations. What would happen if any one were foolish enough to try to follow the directions, and the not unlikely result of an inquest ensued? Would the jury rest content with a verdict of temporary insanity, or would they, if the facts were duly reported to them, endeavor to attach the blame and the responsibility of the death to the ignoramus who had written the "advice," or to the editor who had printed it? A man of average intelligence would probably detect danger in the scornful tone so often assumed toward doctors and chemists, and the support tendered to "medical botanists" and "herbalists," still, the most unexpected things sometimes happen, and it is quite conceivable that an attempt might be made to try the virtues of a remedy if it could be obtained with little trouble. The following extract from a lay contemporary sufficiently indicates the amount of knowledge which characterizes so many of these attempts at "advice."

"Vertigo. This is often caused through overwork and insufficient blood supply to the brain. Medical botanists frequently effect a rational cure after doctors have utterly failed to do any good. The following is a remedy I can strongly recommend, and the ingredients can be obtained of any herbalist—not chemists: Of acid extract of sar-aporilla and peroxyde of hydrogen each one and a half ounce, of the four-per-cent solution of glonoin one ounce; to be mixed well together; dose, one tablespoonful in a wineglassful of water, to be taken before meals. The digestion may be aided by taking pure rhubarb pills, such as are made in large quantities by herbalists. The compound pills contain mercury, and are highly injurious to health." This is a gem. A dram dose of a four-per-cent solution of glonoin ought effectually to stop vertigo for all time. Perhaps it may be worth pointing out that the pharmacopeial dose of the one-per-cent solution ranges from a half to two minimis. It would be charitable to assume a misprint, but the probability of this is reduced by the discovery of mercury in compound rhubarb pills, and by the warning (which, after all, is a compliment) not to apply to chemists for this precious remedy.—London Lancet.

ARTIFICIAL NEURASTHENIA.—Dr. von Peli-zarva (Deutsche Med. Woch.) describes a condition which he has observed to come on in a patient undergoing the water treatment at mineral springs, and to which he has applied the name of artificial neurasthenia. This condition has frequently been described as bath or spring fever, but the author of the present article says that it is undoubtedly a form of nervous disturbance resulting from the indiscriminate use of the bath and drinking of the mineral waters.
It is well known that there is a great difference in individual ability to react from certain shocks. At one time reaction from a cold bath would be prompt; at another there will be distinct loss of control of the will, shrinking, and so forth, followed by depression and weakness. When such results obtain and the baths are persisted in, the process will undoubtedly cause lessening of the resisting power of the nervous system. When it is remembered how great is the number of people ordered to the baths by physicians, and how many go on their own account and take a regular course of treatment, in spite of the discomfort it may cause, it is not to be wondered at that patients return with neurasthenia or an exhaustive neurosis. The condition is soon established, and it is for this reason the author urges upon medical advisers sending patients to the springs, and also upon the physicians attending there greater care in the selection of cases destined to undergo regular treatment. Due to the lack of the necessary foresight in this regard, Carlsbad and Kissengen are prominent sites for the promotion of this form of nervous artificial neurasthenia.

Caucasian Stations for Phthisis.—In a paper published in the Transactions of the Caucasian Medical Society, Dr. Seslavin gives some account of observations made during a two years' residence in Abas-Tuman, one of the best localities in the Caucasus for phthisical patients. This, like Kislovodsk and Borzhom, is a summer station, winter ones being represented by Batoum and Sukhoum, in which the weather is warm enough to allow patients to spend the best part of the day in the open air, enjoying the sunshine and breathing the pure air of the steppes. These stations can be recommended from October to the middle of May, during which period malarial fever is at its minimum. In the summer the heat is excessive, and there is a good deal of fever and diarrhea. In the summer stations named, which are all situated in a gorge protected by mountains from northern winds, the temperature is moderate, and fever and diphtheria are practically unknown. Nine out of ten of Dr. Seslavin's patients improved very soon after coming to Abas-Tuman, the temperature falling and the night-sweats diminishing, or even ceasing altogether, the patients also feeling much better and coughing less. As a rule, the body weight at first slightly diminishes, but subsequently it increases. In most of the cases the physical signs showed an improved state of the lung, the bacilli in the sputa sometimes diminishing in number very perceptibly, and in a few instances, when the patients remained at the summer and winter stations for several years, they disappeared altogether.—London Lancet.

E. Bouchet.—This eminent French pediatrician died in Paris, November 26, 1891, at the age of seventy-three years. Bouchet was a voluminous writer, many of his productions being honored by special recognition. His pugnacious disposition, and the force with which he defended his ideas, prevented him from reaching the goal of his highest ambition, a membership in the Academy, and a professorship. His most extensive work was a large, systematic treatise on pediatrics, entitled "Traité pratique des maladies des nouveau nés, des enfants à la mamelle, et de la seconde enfance."

He was a strong advocate of the use of the ophthalmoscope in the diagnosis of cerebral diseases; cerebroscopy, he termed it.

He was the originator of intubation of the larynx, and his essay, "Du traitement du croup par le tubage du larynx," may be found in the Comptes rendus de l'Académie des Sciences, and the Gazette des Hôpitaux for 1858.—Jour. Am. Med. Association.

The Next International Medical Congress.—It is considered likely that the date of the next meeting of the International Medical Congress, which is to be held at Rome in 1893, will be fixed for September instead of Easter, as at first proposed. The Organizing Committee has not, however, yet come to a final decision on the subject. Prof. Bacelli is the president, and Dr. Maraglino the secretary-general of the committee. The following are the sections of the Congress, with their respective presidents: Anatomy, Dr. Antouelli, Physiology, Drs. Albini and Albertoni; Pathology, Drs.
Der Exp Therapeutics, First Hygiene, Ophthalmia, Treasurer, also city evening, evidence, a philadelphia, who was in semiunion. Neurotic dim in cures, atropine, neuritis, been many applications for membership have already been received, and the attendance is expected to be very large.

Suggestions Respecting Sciatica.—Dr. G. Eliot, in an article in the New York Medical Journal, says:

A large proportion of cases of sciatica are neuritis, and not simply neuralgia.

Temporary relief of suffering should be secured by hypodermic injections of morphine, atropine, or of theine.

Among the curative agents salicylate of sodium and iodide of potassium are especially valuable—the former in acute, the latter in chronic cases.

Considerable benefit may often be derived from the administration of the more purely neurotic drugs, aconite, belladonna, and gelatinum.

Cantharidal blisters are of very great service in promoting the cure of the disease, when used in conjunction with appropriate internal treatment.

Death of Professor Gerhard.—We regret to have to announce the death of a colleague, an active worker in the Medico-Chirurgical College and Hospital of Philadelphia, and a gentleman who was one of the early teachers and clinicians in this institution. Dr. Gerhard, who was fifty-two years old, died at his residence, 661 North Sixteenth Street, Philadelphia, from an attack of influenza, on Tuesday evening, December 15th, after a sickness of only a few days. Dr. Gerhard came to this city from Montgomery County, where his family were among the early settlers. He was a graduate of Franklin and Marshall College, and also of the University of Pennsylvania. He was the writer of some valuable medical papers, and prominent in the Reformed Church. Wide as were his attainments, they were not broader than his sympathies for the poor and his kindness of heart.

American Association of Obstetricians and Gynecologists.—The following officers of the Association for the ensuing year were elected at the business meeting: President, Dr. A. Vander Veer, Albany, N. Y.; First Vice-President, Dr. Hampton E. Hill, Saco, Me.; Second Vice-President, Dr. Robert T. Morris, New York City; Secretary, Dr. William Warren Patten, Buffalo, N. Y.; Treasurer, Dr. Xavier Oswald Winter, Pittsburgh, Pa.; Executive Council, Drs. Charles Alford Lee Reed, Cincinnati, Lewis S. McMurtry, Louisville, George H. Robé, Baltimore, James F. W. Ross, Toronto, William Wotkyns, Seymour, N. Y. The next meeting is to be held at St. Louis, Mo., on the third Tuesday in September, 1892.

Assassination of a Physician.—A note in a late number of Le Progrès Medical announces the murder of Dr. Béziat, chief of the Medical Service of the French colony of Suberbieville, on the west coast of Madagascar. The doctor was about to return to France, and, with an escort had taken a canoe to board the steamer Lorraine, which lay about two and a half miles from the town. In passing a ford the boat was fired upon by native bandits, who were hidden in the reeds lining the river-bank. Dr. Béziat received two balls at close range, fell into the river and was dispatched by spears. His companions also perished. He was bringing home a valuable geological collection.

Some Answers of Students.—The Chemist and Druggist quotes from the Bedford College Magazine some curious specimens of students' answers about nitrous oxide. One of these is the following: "Nitrous oxide is often called laughing-gas. With this gas they pull out teeth; this is the reason they call it laughing-gas." Another is: "Nitrous oxide has a sweet taste, has a soothing influence, is an esthete." Others there were that were quite as wide of the mark, but these will show how superficial an impression can be made on the mind of a chemistry student.—Jour. Am. Med. Association.
Original Articles.

TREATMENT OF THE THIRD STAGE OF LABOR.*

BY T. L. M'DERMOTT, M. D.

I feel acutely the task of trying to edify men whom I meet daily in our busy rounds, and whose acquirements I have learned to recognize and esteem. There is no doubt in my mind that the best teacher we have is personal experience, and its ventilation here is the conveyance we bequeath for mutual information. And especially is this the case in the class of cases that have come under my observation connected with the third stage of labor. I know ordinarily, in an accouchement, it is the universal feeling both with the profession and laity that congratulations are in order as soon as the delivery of the child is completed; and the bustling midwife and the disenthralled father are both pinnacled on happiness when that august event is accomplished. Likewise the recumbent sufferer feels that the travail ends with the pangs of labor, and nothing is left but the shouting and the christening. I beg, however, to differ with this generally accepted view, and take the ground that the successful treatment of the third stage is really the most important of the different stages. First, because in the great majority of cases the first and second stages are accomplished vis naturæ and are with difficulty interfered with, but in the third stage, in unskilful hands (and the latitude of action is enormous), we find the greatest dangers that attend the parturient period. And in several ways, prominent among which are the septic infections, although post-partum hemorrhage and adherent membranes, with subsequent sequeque, play no unimportant part. When and how to deliver a placenta, whether in the accouchement of an aborted ovum or after a tedious labor, must of necessity give the greatest play for the masterful or malicious treatment of a process upon whose undoing so many unhallowed victims have paid the penalty with their lives. Of course I class in this category the lightning-like process as well as the unwittingly unconscious accoucheurs who leave their patients absolutely undelivered.

In my earlier professional career—and I was loaded with book lore, I thought, to the brim—I never felt satisfied until I had succeeded in removing every thing I could feel or lay hands on; but of later years with larger experience, and I hope with ripened judgment, I have learned the little axiom, "To wait." The same conservatism that teaches the surgeon to staunch his bleeding points and wait their occlusion holds equally well but more forcibly in this, for they lie beyond immediate contact in the puerperium. Nature's processes in this condition are rarely judicious, and it becomes the exception when their perversion is not the means of mischief rather than the successful accomplishment of a natural end. To the every-day doctor the safe conduct of early cases of course is the more frequent, while tardiness gives the greatest concern. It is well to recollect in this connection, and a fact not often emphasized enough in medical literature, that several hours are necessary in early miscarriage to successfully separate the secundines—the time growing less as pregnancy advances. So that "less haste, more speed," never was more aptly true than in the management

*[Read before the Louisville Medico-Chirurgical Society, November 13, 1891.]
of this class. Indeed, it has almost become a practice with me to visit a patient in an incomplete abortion at three months with the same periodicity I would observe in a patient with an intermittent fever, and with equal confidence in either. Of course the cardinal principle underlying the proper management of the case is the complete removal of the membranes; but it is equally true that at two or three succeeding visits we find portions presenting and this removal expedited and the safety of the patient assured by awaiting their gradual separation. Nor is it any less wonderful in these various complexions, when it seems impossible to separate without injury to the organ, to see how splendidly nature comes to our assistance and denudates the offending material and rapidly completes a physiological recovery if properly assisted with antiseptic safeguards. In parenthesis I might say it has almost become habitual with me in this class of cases to order daily sluicing of the vagina with the carbolic acid or a bichloride solution after delivery. For at this time more frequently than later, owing both to the violence of nature and the necessary efforts of the accoucheur, are we more liable to have the febrile disturbances that jeopardize the puerperal state. And first and foremost of all the means at our disposal is the educated finger. Its action is more deft than instruments, and it may be used with less risk to the underlying structures. Putting the patient on her back with the feet well drawn up, the hips self-elevated by the patient, and with supra-pubic pressure with the disengaged hand, I can scarcely recall a case in which it was not possible to entirely sweep the uterine circuit, dislodge its contents, and empty the cavity. As for the placental forceps and the curette, they have almost become obsolete in my obstetric armamentarium—used, if ever, in cases that have come under observation when hemorrhagic or febrile exigencies have arisen from lack of a medical attendant.

Careful examination in every case of suspected trouble is imperative. The practitioner who would treat an abortion for a colic, and apply a sinapism for the relief of pain, as I have seen done, or take the testimony of the nurse or the patient and leave an unde-

livered placenta to be found by a more pain-taking successor, either ante-mortem or post-mortem, richly deserves the self-inflicted censure his folly has imposed. It has been my experience more than once to have felt I have reached and removed all secundines, the os noteri apparently closed, to find later additional contractions and to have succeeded in removing more placental cotyledons, which if left undisturbed would have given great annoyance. It is also a practice, both for the safety of the patient and the comfort of the doctor, especially at night, to apply the tampon; and I have been rewarded in both ways on more than one occasion, when, on a morning visit, instead of finding an exsanguinated patient with a grimy couch I found some bloodless cotton and a delivered placenta. As to medical management, nothing excels the exhibition of ergot and quinine.

With this desultory outline of the treatment of the third stage in miscarriage, I can summarize with the reflection that I have seen uniform satisfactory results ranging through a large experience. Equally so has been the observation of this tentative policy in labor at full term. As a beginner, and as is the universal custom, as I have seen it, with midwives, it was my practice to remove the after-birth at once. Later and unvarying experience has taught me "to wait." Giving the overtaxed organ time to rest, allowing the membranes to separate, clots to form, and uterine action to recur, complete contraction takes place, and I am not confronted with later hemorrhage, and only in the worst cases with the annoying after-pains that formerly were the rule and grief of nearly every parturient woman.

Of course in so large an experience it has occurred to me, as others, to meet cases in which the removal of the placenta becomes a task at times of no mean pretensions. I once encountered an hour-glass contraction in a primiparous woman, whose pregnancy occurred late in life, which was especially aggravating, but happily relieved by the full introduction of the hand and tedious coaxing. In this instance I was compelled to extract it without an anesthetic, and it was difficult to tell who made the most outcry, the woman or myself. The
next case, a little later, was one of uterine inaction, with alarming hemorrhage, which could only be relieved by persistent efforts to cause contraction and manual assistance. Still another, in which sphincteric contraction of the os occurred as soon as the second stage was completed, in which, after complete narcosis with chloroform, assisted by Dr. Anderson, the membranes were removed with great difficulty. Several times I have been confronted with adherent placenta, which of course existed before the inauguration of the third stage. The point I wish to make in all these cases is, that I had satisfied myself by an early examination of their location immediately after the birth of the child, as is my custom, and that they could not have been obviated by a rapid placental extraction.

An antiseptic tablet for self-ablation is the shield of the patient and the buckler of the accoucheur, and no case of labor should be encountered without this double guardon to both. Digital compression, through the abdominal parieties, of the receding womb, both after expulsion of child and membranes, is, in my opinion, of inestimable value, the wisdom of which has been strengthened year by year. In closing this epitome of some phases of a very common subject, I must confess that I have at times been astounded at the seemingly disastrous perils the parturient woman so frequently escapes, and the heroic fortitude with which they are borne. And in all nations and all ages the symbol of self-sacrifice is exemplified in its highest sense and finds its greatest luster in the unfaltering heroism of the gentle mother during this fateful epoch.

Louisville.

FACE PRESENTATIONS.*

BY A. D. PRICE, M. D.

As physicians we deal with human life, and it is not always fair sailing; the unexpected often happens. To keep our wits sharpened and at our finger-ends, to be prepared for emergencies, to be equal to the demands of the occasion, is a duty we owe ourselves and those under our care.

*Read to the Central Kentucky Medical Association, January 20, 1892

Circumstances often arise in the course of professional life when decisions must be made with promptness and executed with judgment; and these are more apt to happen to the general practitioner of the town, village, or rural district than to his more favored brother of the city. He often finds himself confronted with difficulties, and with no one to aid him in his trials and to comfort him in his tribulations.

Fearless by nature, self-reliant by education, determined by an innate desire to work out his own destiny, he enters faithfully upon the discharge of his duties, and in ministering to the needs of the afflicted is continually meeting with cases that develop and strengthen these noble qualities.

Throughout this great land, in the city and in the town, in the village and in the rural district, we find men worthy of their great calling striving to put themselves upon a higher plane, and lending a helping hand to the brother desiring to profit by the labors of others.

To gain knowledge, to become more and more proficient, to be qualified for the proper and efficient discharge of professional duties should be the physician's great aim and honest desire.

To this end and for this purpose medical men throughout the civilized world associate themselves together, and no one, however great in attainments, can stand aloof without detriment to himself and without seeing his perhaps less favored but plodding, honest, earnest, persistent working brother outstripping him in the race for honors and usefulness.

The following case, presenting no unusual features and possessing nothing of particular interest, will serve as a text for what follows:

Mrs. G., aged forty years, American, the mother of five children, was taken in labor at 12 m., July 4, 1891. I saw her at 4 p. m. The cervix was soft, and os fully dilated; the "bag of waters" was narrow and long, reaching to the floor of the pelvis.

Realizing that I had an abnormal condition of things with which to deal, I introduced my hand and was enabled to diagnosticate a face presentation, with the chin anterior and to the left. The face was engaging in the superior strait; the "pains" were severe and regular. Efforts to correct the faulty position were nil.
Knowing that such labors were long and tedious, jeopardizing the life of the child and increasing the danger of the mother, I determined to hasten the delivery while both were in good condition. Chloroform was administered, the membranes ruptured, and efforts to correct the abnormality again made, but without effect. The foreeps were now applied and traction was gently and carefully made at short and repeated intervals. The instruments had a tendency to slip, and it became necessary to readjust them several times. Within one hour a living child was delivered; its face was dark, much swollen, and greatly disfigured. Time, however, restored its normal features. Thorough antisepsis was employed, and the patient convalesced speedily and without an unpleasant symptom.

These cases are apt to be lingering, and the great exhaustion that follows adds to the danger of the mother; the child also is in great jeopardy from asphyxiation.

I simply mention this case to emphasize the importance of as speedy delivery in face presentations as is compatible with the safety of the mother and child. Do not wait till exhaustion supervenes, till the life of the mother or child is trembling in the balance, till a forlorn and hopeless condition compels something to be done, but deliver as soon as the patient’s condition will admit of instrumental aid.

Face presentations are rare, occurring about once in every two hundred and twenty-five cases. They are said to be less frequent in America and England than in France and Germany. They occur as frequently in the primipara as in the pluripara. They are primary or secondary. The primary generally occurs in the primipara, and is often due to the uterine contractions before labor.

These presentations are, however, usually produced during labor; the extension of the chin commences above the brim, and the face consequently enters the pelvis.

Of the many causes of face presentations obliquity of the uterus is the most frequent; and as the uterus is more frequently deflected to the right, so the left mento-iliac positions are the most common.

There are four principal varieties of face presentations: the chin to the left, and either anterior or posterior, and the chin to the right, looking forward or backward. Thus the long diameter of the face corresponds to the one or the other oblique diameter of the pelvis.

The diagnosis of these cases is not always easy. When the head is at the brim and the membranes are unruptured external manipulation will often give us positive information. The chin, mouth, nose, and orbits are diagnostic points, and when recognized enable us to form correct conclusions; but when the face has been long in the pelvis, and concomitantly much swollen, we are often at sea and unable to have a definite opinion. Under such circumstances the administration of chloroform and the introduction of the hand to enable a correct diagnosis to be formed are perfectly legitimate.

When the membranes are elongated, reaching to the floor of the pelvis, while the presenting part is at the brim, we are pretty safe in concluding that the position is faulty, and that trouble will be encountered.

In these cases the danger of the mother is greatly increased, owing to the long, tedious, and protracted labor, and those of the child are multiplied many times. When the chin is anterior, one child in ten is still-born; when posterior, death is almost a certainty—delivery taking place only when the child is unusually small or the pelvis abnormally large, and then generally at the cost of the little one’s life.

The better to understand the mechanism of face presentations, it is well to recall for a moment that of the vertex. In the latter the body of the child is flexed, as it were, upon itself, the chin on the chest, thus enabling the head to enter the superior strait in the most desirable position. The force is transmitted through the spinal column of the child in practically a direct line to the flexed vertex. Descent, rotation, extension, and external rotation are the next succeeding steps.

In face presentations there is a state of extension, the head being thrown back, more or less, on the posterior plane of the child; the force is thus transmitted through the spinal column at a right angle to the vertex, and the chin, being the short arm of the lever, descends while the forehead ascends.

The various steps of face presentations are,
then, extension, descent, rotation, flexion, and external rotation.

When the chin is anterior the labor is, as a rule, protracted and more or less dangerous to mother and child, demanding, as I believe, its early termination by instrumental aid while the patient is in the best possible condition to receive assistance.

Posterior mento-positions generally start as such, and when the chin fails to rotate forward then comes the tug of war. Advance is slow, and descent only to the extent of the child's neck. To descend farther there "must be a dragging down of the trunk, a jamming of the presenting parts." The chin being extended to the uttermost, the occiput is thrown back on the dorsal plane, thus giving a diameter of $6\frac{1}{2}$ inches (the occipito-bregmatic, $3\frac{1}{2}$ inches, and the dorso-ternal, 3 inches) to pass through a diameter of $4\frac{1}{2}$ inches, which is readily seen to be an impossibility. Again, to be born in this position, "the chin must sweep down the sacrum and coccyx and over the perineum, a distance of 8 inches," a space unable to be traversed by the short neck of the child.

And now, what are the indications in these always difficult cases of mento-posterior positions? What procedures are to be instituted to accomplish what nature is unable to do? The woman must and should be delivered while in the best possible condition for it. How is it to be done? I would say, never attempt it by the application of the forceps. It is impossible to drag and squeeze a diameter of $6\frac{1}{2}$ inches through one of $4\frac{1}{2}$ inches. An effort of this kind only makes a bad condition of things worse.

Correction, version, and craniotomy are the only things that can be done, except some enthusiastic gynecologist should insist on cesarian section, a procedure that would be justifiable under certain conditions.

The happy moment, the opportune time is the early recognition of the abnormal position, when it can sometimes be corrected by internal and external manipulations. These maneuvers, if delayed till the head has become engaged or, worse, impacted in the pelvis, are exceedingly difficult, if not impossible, as well as dangerous.

Failing to correct the position, version is the next step in order, which is readily accomplished if undertaken at the proper time, but if delayed till the head has escaped the cervix or become impacted in the pelvis, the opportunity has passed and this method must not be considered. By early version delivery is readily accomplished, and the life of the child often saved. By the knee chest position correction or version can often be successfully performed, when otherwise efforts in this direction would result in failure.

Craniotomy is the last and only resort when the foregoing measures have failed.

And what must be done, let it be accomplished promptly, judiciously, and with care, and in the best interest of her who has intrusted her life to your skill and judgment.

HARRODSBURG, KY.

Dr. Gideon S. Palmer died at his home, 1113 Massachusetts Avenue, Washington, D. C., December 8th, in his sixty-ninth year. Dr. Palmer's illness was of protracted duration, and his death was not unexpected.

Societies.

ALLEGHANY COUNTY MEDICAL SOCIETY.

Stated Meeting, December 15, 1891, T. D. Davis, M. D., President, in the chair.

Subject for discussion, Syphilis.

Dr. Thomas: It was but a few days ago that I received a notice requesting me to open a discussion at this meeting. It is usual to open the discussion with a well-digested paper. The time has been so short that it would be impossible for me to prepare any thing worthy of the dignity of a "paper." What I shall present will be more in the form of a syllabus, expecting you to elaborate.

1. How long is syphilis contagious?

The profession as a rule does not have definite and uniform opinions upon this point. Judging from remarks that I have heard made at various times, some believe that there is no limit to the contagious character of syphilis, forgetting that the disease is a self-limited one. Possibly I can formulate my views better by
reporting three cases, from a number of similar ones from my case book, as follows:

Case 1. Mrs. A. married when the man who became her husband was in the secondary (end of first year) stage of syphilis. In ten months afterward she gave birth to a very large and healthy-looking child, weighing twelve pounds. The child was still-born, not from syphilis, but from asphyxia, owing to tardy delivery of the head, the presentation being pelvic. The case was in charge of a midwife, and when I arrived upon the scene I found a dead child hanging from the vulva.

In nine months after she gave birth to a macerated fetus of five months utero-gestation.

In another eleven months she again gave birth to a macerated fetus of seven months utero-gestation.

In one and a half years more she gave birth to a full-term and healthy-looking child. In a short time this child developed a popular syphilide. It remained under my care for two years, and is now a large, healthy-looking lad.

In another twenty-one months she gave birth to a fine child that never presented the least suspicion of syphilis.

In two years more she gave birth to a healthy child, which is now nearly three years old, and has never shown any evidence of syphilis.

Mrs. A. has been under my continuous observation since her first accouchement. I have been unable to get a history of primary lesion or secondary symptoms in her case; she passed through them without her knowledge; but I have treated her for serious tertiary lesions, such as deep ulcers on the posterior fauces, headache, and syphilitic liver.

In this case, supposing the mother acquired syphilis in the early months of marriage, the contagious character of the disease disappeared in about four years. She received no treatment for her early syphilis.

Case 2. Mr. B., in the summer of 1885, acquired a chancre on the lip through kissing a prostitute, and conveyed the disease to his wife, who was also treated by me. They already have several children.

On March 3, 1886, a living child is born, but dies in five months from marasmus, having been puny from birth.

On May 30, 1887, at full term, a macerated child is born.

On August 31, 1888, a healthy child is born, and remains free from the disease.

On February 17, 1890, a healthy child is born, and so remains to the present time.

In this case the mother ceased to convey or transmit the disease in less than three years.

Parenthetically I mention that Mr. B. also conveyed the disease to his little son, two years of age, by kissing him on the forehead, where there happened to be an abrasion, for it was here the chancre developed. Recovered.

Case 3. Mrs. C. contracted a chancre about the time of her marriage, and was treated by me for the secondary lesions. She became pregnant for the first time in twenty-seven months after her marriage. The child was born at full term and apparently healthy, but in about three weeks snuffles began, an eruption appeared about the anus and afterward over the body. After a long treatment it recovered.

In one year and three months after the birth of her first child she again became pregnant, went to full term, and was delivered of a healthy-looking child. This child is now about three months old, and has shown no signs of syphilis, neither has it received any anti-syphilitic treatment.

In this case the contagious character of syphilis disappeared before four years and three months—some time after the third year.

You may say that this child is only three months old, and that it may develop syphilis later. If a child is born, and does not present evidences of syphilis before the end of the third or fourth month, it is rare that it ever will. Out of one hundred and fifty-eight cases summarized by Diday only five cases presented symptoms of syphilis after the fourth month.

In brief, then, I believe that syphilis is not contagious as a rule after the third year. Exceptionally in the female it may continue until the fourth year.

2. What secretions contain the syphilitic virus?

None of the physiological secretions of the body.

Experiments by inoculation have been prac-
tryed again and again with the physiological secretions of syphilitic patients upon healthy persons without the production of the disease. Diday and others have inoculated persons with the saliva from syphilitic patients who were free from mouth lesions without results. Spermatozoa from a patient in the height of the secondary stage of syphilis have been inoculated by Mireur in the non-syphilitic without producing the disease. The same thing has been done with the other physiological secretions of the body, and with a like result. The only elements, then, in the body that contain the germs of syphilis are the blood and the serum which is found upon the lesions of syphilis upon the skin and mucous membranes. A man may be suffering from the secondary stage of syphilis, and, providing he be free from lesions of the skin and mucous membranes, may procreate a perfectly healthy child, because he can not inoculate the mother, and a non-syphilitic mother never brings forth a syphilitic child. She can not.

Dr. Batten: I have given a great deal of thought to this subject. The presence of the syphilitic germ depends a great deal on circumstances, upon the temperament and the constitution of the patient. In the discussion of this question we have to depend a good deal upon the truthfulness of our patients. It is impossible to watch a patient carefully. We must depend a great deal upon his veracity. Now I believe syphilis may be conveyed a long time after the patient has contracted the disease. For instance, a man had contracted syphilis in about 1869. He married in 1882 a very plump and healthy woman who weighed about one hundred and twenty pounds. Shortly after she conceived and gave birth to a child. Sometime during her pregnancy she took syphilis, and I treated her. The child was born healthy, but the mother was reduced to ninety-five pounds. She had a second child, and it is healthy. Both of these children are healthy, though the man's appearance denotes that he has syphilis, and denoted that before he was married.

Another case was a man whom I treated for the disease twice. He went through the usual course. He married, and his wife has had three children, and they are all healthy. The wife is a healthy, fine-looking woman, and is well.

Another case that came under my observation was a young man who had the disease. He married and impregnated the wife, and the child was dead in the uterus. Before her next pregnancy I put her under treatment, and since that time her children have all been born healthy, and all are healthy and living at the present time. I believe, and my experience bears me out in my belief, that a person once syphilitic is always syphilitic, and that the disease may be conveyed through any of the secretions of the body.

Dr. Green: I have no criticism to offer on the paper. I believe my observations would lead me to agree with the paper. I might state an example or two that have come under my observation. One case occurs to me in reference to the length of time that the poison may remain in the system and be conveyed to others. I remember treating a young man quite a number of years ago (I think some seventeen, probably eighteen) for syphilis. He went through all the usual symptoms, primary and secondary. I told him not to marry for at least three years. I was not aware there would be no danger at that time, but I supposed the most dangerous period would be passed; but he married short of three years—two years and eight months. I attended his wife in confinement, but failed at any time to observe any syphilitic symptoms in the first child. I attended her in seven confinements, and I never saw healthier children than these. They are all living to-day. When I see them I fail to see symptoms in any of them. And to show you how violent an attack of syphilis this young man had, he resigned his situation and left the city and went into Maryland while the eruption was on his face. He was completely discouraged during the first year of his illness. It seemed to break his entire constitution, and I can not tell how it happened these children are so healthy. The father of the children was killed about a year ago. About three months ago I saw the mother of the children, and according to my observation she has never shown any symptoms of syphilis. I could mention numerous instances similar to that.
Dr. Shillito: In 1883 a gentleman came to my office, who at that time expected to be married very soon, and related this history: He told me that during the war he was a clerk in Washington City. He had contracted syphilis, and had been treated by what he considered the best physicians he could find. He came to Pittsburgh, and up to that time had one attack of irritis. He had also had a skin eruption. When I saw him he seemed to be a man of average health. The nasal septum was perforated. I told him, after so long a time, and after having received so much treatment, that there was no particular danger of transmitting it to his offspring. He married. I attended his wife in confinement and delivered her of a living child. I think about one third of the epidermis of the face had gone, and one eye was entirely gone. The other eye was wanting until you could only see a little coloring of the cornea and one spot that seemed to be as large as a pin-head, but since that time it admits a little light. That child enjoys good health, most excellent health, up to the present time, although of course permanently blind. I took special care to watch the mother both before and after for any marks of syphilis. I have knowledge of her ever since until up to a very short time ago, but I have not seen her within a year or two. She has had no evidence of syphilis. I understood, about a month ago, that she had become insane or troublesome, and had to be taken away to some asylum. They had but one child. He contracted syphilis during the war, and the child was born in September, 1884.

Dr. Thomas: What was the form of the trouble with the child?

Dr. Shillito: The epidermis of the face was nearly half gone. One eye was entirely gone and the other had just a stump.

Dr. Williams: It may be that the original trouble contracted in Washington City was not syphilis. He might have had bubo, and not had syphilis after all. There might be a suspicion that he contracted syphilis a year or two prior to his marriage, and I think it is certainly a fact that a person may contract syphilis and not have any perceivable primary lesion. I am certain of that. I have had some experience in some of these cases, and it would certainly bear out the statement made by Dr. Thomas; and I could relate a number of instances to substantiate my position. For instance, in one case a young man had syphilitic trouble in 1883, and about the beginning of 1884 was married, and his wife was delivered of a still-born child about the beginning of 1885. About ten or twelve months after she had another still-born child. About a year after that she was delivered of a living child. About 1887, and within the past two years, I have attended her twice, and her children are apparently healthy and doing fine. This was some eight years after the father contracted the disease. I am certain that if a case is properly treated the liability to convey the disease disappears after a period of three or four years. I think it depends on whether the patient has been properly treated. Unfortunately some of them are not well treated.

Dr. Lange: The matter introduced by Dr. Thomas is one upon which, likely, no medical body in the world would have one opinion in almost any aspect. For instance, Dr. Batten has said that temperament, disposition or character has an influence in contracting syphilis; that a plump person with ruddy skin, blue eyes and light hair is more liable to take syphilis than a brunette. In other words, that the so-called lymphatic temperament is a predisposing cause. Now a good many members here will not agree with that opinion. It may be that a patient of lymphatic temperament will suffer more severely, but I do not agree that such an individual will take syphilis quicker or more readily than a brunette. Dr. Thomas asserts that none of the secretions are contagious if the patient, after having syphilis, presents no symptoms. I have a family in my care where the father contracted syphilis after marriage, after having two robust, healthy children, he himself being a remarkably robust, healthy man, an oil driller, and his wife being a strong healthy woman. This man had two children when he contracted syphilis. He had treatment for three years, and at the end of that time presented no symptoms. Then he had two additional children born without symptoms; one of these is now about five years old and
the other three. They have presented no symptoms of syphilis. Now he has a child, eighteen months old, which is syphilitic very distinctly. It may not be fair to say, with some members here, that once syphilitic always syphilitic, but it is certainly remarkable that toward the end of life syphilicides who presented no symptoms for many years again have this disease reassert itself, and often such assertion ends life. This comes as aneurism, apoplexy, atheroma, and as connective tissue hyperplasias of the brain, the liver, the cord, etc.

Dr. Barclay: My impression is, from what I have seen, that syphilis after the secondary stage is possibly not contagious, although I am not certain about that. It is not advisable for persons who have had syphilis to marry short of three years after the syphilitic manifestations have disappeared; that has been my rule, to advise persons who have had syphilis not to marry short of three years after all manifestations have disappeared. I have said to them with a good deal of confidence that I thought it would be safe after that time to marry. I saw recently a young girl who was poisoned by a dentist. The dentist who extracted her tooth abraded her lip. I saw her three weeks afterward, and my opinion was, after I examined her, that she had been poisoned. I was careful not to give her a positive opinion, but advised her to see other physicians. They were of like opinion, advising me to watch the patient for manifestations. The secondary manifestations came on in about sixty days afterward, and there is no question she was poisoned in that way. She said the dentist hurt her lip at the time he extracted her tooth. To me it was a very interesting case. I have treated her since, and her hair has dropped out. This case was referred to a lawyer, and in all probability there will be a case in court. I have placed myself in a position of security by having her see other physicians; three or four other physicians have examined her, so if it comes into court the profession may be protected.

Dr. Buchanan: I have nothing to say on the subject introduced by Dr. Thomas, but I have a word to say about the case which was reported in which a dentist is charged with having introduced syphilis by means of his instruments. We all know the variety of ways by which an abrasion of the lip can be made. I think, if this case should come into court, the plaintiff would have the very greatest difficulty to prove even that it was shown that the abrasion on the lips of this patient was the site of the chancre, showing that the inoculation was made by the instrument that produced the abrasion. Suppose this lady had a family friend who had something on her lip, and that she kissed that friend good-bye at a station about the time she received the injury at the dentist's, she would have received this inoculation and the dentist would have to bear the blame. This girl might have received the inoculation by a drinking-cup, she might have wiped her face with the towel that the servant girl had used, she might have received it in a thousand ways, and still this dentist must bear the blame. I think, as we use instruments ourselves, we should be exceedingly careful of implicating in any way any member of the cognate profession of dentistry.

Dr. Barclay: I appreciate what Dr. Buchanan has said, and I have been just as careful as he could be. It seemed to me, from the history of the case, that she was certainly poisoned by the instrument. I know and appreciate just as highly as any one could how much danger there is to the dental profession and the medical profession from this very cause, and I very carefully looked into that matter, and I am well satisfied when I say I believe she was poisoned by a dentist's instrument. The history of the case goes to prove very clearly that the lip became indurated the third day, that there was a large lump in her lip and the glands were sore. Of course what Dr. Buchanan said is true; she may have kissed a friend. I inquired as to that, and I am satisfied, if she was poisoned by any other means except the one referred to, she was innocent of knowledge of it.

Dr. Buchanan: According to this statement the chancre appeared on third or fourth day after the inoculation. We all know that that is entirely too short a time. We know if we inoculate a person with syphilis it never appears on the third or fourth day; it takes a good while longer. If it appeared on the third or fourth
day after the dentist extracted the tooth, then he did not inoculate her.

Dr. Barclay: Morton, in a recent work, states it may make its appearance on the first up to the seventieth day.

Dr. Davis: I would like to ask the Society if any one has known a case of syphilis to be communicated after the third year to their children, or any one else; that he can say of his own experience syphilis has been communicated after the third year.

Dr. Williams: I have in my charge a man who was married seven years ago, who had an eruption on his body. He had a chancre, but did not give it any attention. About six months after the manifestation of syphilis, after the rash manifested itself, he married, and in due time a rash of a similar kind came over the wife. He was then taking antisyphilitic treatment. I do not remember the exact year, I think three years after his marriage, his wife was delivered of a child, and, unlike the cases reported by Dr. Thomas, there was a manifestation of syphilis on the skin, entirely covering the child. The child died in about three weeks. Four years after this the man was presented with another member of the family, and a like condition exactly was manifested in the child. During this time he was taking antisyphillic treatment.

Dr. Lange: I stated a case a little while ago, and forgot to say that during the time these three children were conceived and born the mother had not at any time any manifestation of syphilis; never at any time. Two of the children are healthy, the last one syphilitic, and the mother at no time presented syphilis.

Dr. Davis: Do you know whether she could have taken syphilis?

Dr. Lange: She never had symptoms.

Dr. Green: Can you exclude all evidence of a nurse or some of the attendants not conveying it to the child? I have seen a number of instances myself where the mother and father were clear, yet the child was syphilitic.

Dr. Lange: These children were fed with bottles, in the hope that if taken away from the mother it would lessen danger in the first two, and the third child was nursed.

Dr. McKibben: On the 2d of August I de-

livered a woman whose husband was treated for syphilis about six months, when he got careless and stopped treatment. After three months he had mucous patches in the mouth, for which I treated him. He was anxious to get married. I told him it would not be advisable, but after a period of eighteen months he married; his wife became pregnant, and the child was born on the 2d of August, perfectly healthy, and the mother has not shown any symptoms.

Dr. Shaw: I have in mind four men who had syphilis before marriage. Three of them had it severe enough to warrant a visit to the Hot Springs. They have all married, all have children, and none of the children have ever shown any manifestation of syphilis. I can not give the exact time in any one case, but an interval of at least three years from the time of the first manifestation of the disease elapsed before marriage took place.

Abstracts and Selections.

Abstract of a Paper on "A New Form of Epidemic Skin Disease."—A large number of photographs and colored drawings of the various phases of the disease were shown, together with charts and tables of the symptoms. Several patients also were exhibited with the eruption in various stages still upon them. After narrating the history of a typical case, the author went on to describe the epidemic as it had occurred in two adjacent buildings, the old Sick wards of the Paddington Workhouse and the New Infirmary. Out of 846 patients who were either in these buildings on July 1st, or came in subsequently between that date and October 31st, 163 had been attacked by the disease, 89 males and 74 females, being nearly 20 per cent. Only two cases had occurred among the staff, the author himself and a housemaid. All the cases bore a marked resemblance to each other, but exhibited considerable variation in detail.

The disease may be described as a universal dermatitis, sometimes attended by the formation of vesicles, and always resulting in the desquamation or exfoliation of the epidermis, attended by a certain amount of constitutional disturbance, and running a more or less definite course of seven or eight weeks. The skin lesion commenced sometimes as a popular or papulo-erythematous rash, sometimes as raised
macule, and in some rare cases as rings; but however it begins, the various elements become confluent in from three to eight days, and produce a crimson, irregularly indurated surface which is continually shedding its cuticle in flakes or scales of various size, from impalpable powder to the entire cast of a hand or foot. If exudation were present, this entangled the flakes of epidermis and formed crusts. A large proportion of the cases were attended by a serious exudation from the formation of vesicles, which were easily broken. By this feature Dr. Savill divides his cases into two groups—the "moist" type to the number of 100, and the "dry," type of which there were 45. 18 being of a mixed type. Several independent areas would be involved at different dates, but they all ran the same course. This condition of things lasted some weeks, several layers of cuticle being shed. By degrees the inflammation subsided, leaving the skin considerably thickened, indurated, and wrinkled. In many cases the new skin presented a raw, parchment-like appearance, smooth and shiny, and sometimes cracked.

The eruption most frequently started on the upper arm or forearm (37 cases), but almost as frequently on the face or scalp (35 cases), 24 being on the feet and legs, 22 cases on the hands, 13 cases on the back, 12 on the neck, and a like number on the chest or abdomen.

The eruption in most cases spread by contiguity to the neighboring parts, and in quite half of the cases the whole surface of the trunk and limbs was involved. The disease began and ended very gradually. In some cases it was preceded by lassitude and loss of appetite, and not unfrequently the eruption would make a false start. Convalescence was tardy, and 38 of the patients had one or more relapses. Considerable irritation of the skin and a feeling of burning and itching were always present throughout the disease.

Of constitutional symptoms, anorexia and prostration were the chief; the feeling of lassitude and weakness was present in all cases; they were often profound, and in some the asthenia was fatal. The temperature remained normal or even subnormal, excepting when a large extent of skin was involved and the inflammation was at its height. The tongue was at first coated, but soon shed its epithelium. In something like a quarter of the cases vomiting or diarrhea, or both, were present. The conjunctiva were inflamed in all the severe cases, and those where the face was involved. The other epidermal structures, hair and nails, shared in the disease in its later stages, and were shed.

In 50 per cent of the cases in which the urine was examined albumen was found, though permanent damage to the kidneys was not noted in any as a result of the disease.

The mode of termination in fatal cases was sometimes by collapse consequent on the vomiting and diarrhea, or more generally by the extreme weakness produced by the eruption. Some died comatose, as in uremia. Dr. Savill connects two symptoms with a fatal issue, a muscular twitching and embarrassed respiration without physical signs in the lungs. Several of the cases were complicated with boils or carbuncles scattered about the body, and in some the skin remained pigmented for long after the eruption had subsided.

The affection has to be diagnosed, in the first place, from erysipelas, especially when it attacks parts containing loose cellular tissue. This is effected by its gradual advent, the absence of pyrexia, in some cases by the presence of vesicles, sometimes by the absence of a raised margin, and sometimes by the wide extent of the rash. Those cases which commenced as macule bear some resemblance to German measles, but the absence of pyrexia and the extreme desquamation are sufficient to distinguish them. The "dry" variety of cases bore a striking resemblance to pityriasis rubra, but they differed in the fact of their being epidemic and in children being almost exempt. Moreover, since we must conclude that Dr. Savill's cases were all one disease, and the "moist" type, which were in the majority, so widely differed from pityriasis rubra, we must also conclude that the other cases did not belong to this category. On the whole, the malady bears more resemblance to acute general eczema than any other known disease, but a typical case differs considerably from this disease in the extent and severity of the dermal inflammation and thickening, in the profuseness of the exfoliation, and in its more definite and fatal course.

The only treatment which availed was the external application of germicides and the administration of stimulants.

The author then proceeded to consider the question of etiology. Age was certainly a very important predisposing condition; for although the Infirmary contained a relatively large number of aged persons, still it was shown that if the inmates were classed according to age into decades, the percentage of those attacked in the earlier decades was considerably smaller than the percentage in the later decades. Thus, of those between 1 and 10, 2 per cent; 10 and 20, 4 per cent; 20 and 30, 7 per cent; 30 and 40, 6 per cent; 40 and 50, 17 per cent; 50 and 60, 24 per cent; 60 and 70, 38 per cent; 70 and 80, 35 per cent; 80 and 90, 24 per cent. Males seemed more prone to take the disease
than females in the proportion of 24 to 16 per cent. After discussing and excluding food, soap, scabies, and water as possible exciting causes, the question of epidemic influences, such as climate, season, and contagion, were referred to.

The clinical phenomena of the disease are alone almost sufficient to stamp it as contagious. Its more or less definite course, the constitutional disturbance, the marked effect of germicides, the wave-like manner in which the outbreak had come and gone, and the fact that 6 out of the 11, who were the only ones out of 202 healthy persons to contract the disease, were "helpers" tending on sufferers from the disease. Nevertheless the contagion is evidently of a feeble order, and seems to require several important predisposing conditions, especially including old age, and sickness or "hospitalism" for its development. The bacteriology and several other points connected with this strange outbreak required careful investigation, and would form the basis of a future communication.—Thomas Savill, M.D., in Edinburgh Medical Journal.

Goitre; its Pathology, Diagnosis, and Treatment.—Berry (British Medical Journal, June 13, 29, and 27, 1891) has made an extremely clear and valuable contribution to the subject of goitre.

He makes five varieties: (1) parenchymatous, (2) cystic, (3) fibro-adenomatous, (4) malignant, and (5) exophthalmic. All of these varieties, except the last, which stands alone, clinically and structurally run very much into each other, so that mixed forms are common.

From an extensive study of the probable causes of goitre, Berry concludes that its coincidence with limestone and calcareous sandstone districts everywhere in England is so marked that its appearance as an endemic disease in non-calcaneous regions is doubtful. All attempts to produce goitre artificially have failed, from the experiments of St. Lager to those of the present day. Animals drinking solutions of the different forms of salts found in water from these regions have never shown any sign of goitre, although goitre is common in lower animals in goitrous districts.

Yet the fact that goitre can be produced by water has been proved accidentally from human experimentation. For example, in a regiment of young soldiers quartered in a goitrous village there developed, in a large proportion of the men, goitres in a few months or even weeks. Again, a town has received a new water supply, and shortly afterward goitre has broken out in a large number of the inhabitants. Conversely, a village afflicted with goitre has been relieved of that disease by changing its water supply.

There are "goitre-wells" on the Continent, to which young men who wish to be exempt from military service resort. After drinking this water for a few weeks they obtain goitres sufficiently large for them to obtain their wish.

Mere hardness in the water does not cause goitre. Berry believes that there is a definite relation between goitre and some poison in the soil, which is carried by drinking water. This may be some mineral ingredient, possibly a salt of some alkali or alkaline earth. From personal experiment he believes that it is not a salt of lime, magnesia, or iron. Want of air and sunshine, climatic and atmospheric conditions, heredity, habits, and intermarriage have apparently no share in the causation of goitre.

The effect of goitre on the duration of life is small. In some cases pressure upon the trachea causes death. Again, if bronchitis or some similar disease intervenes, the patient has a much smaller chance of recovery.

In regard to the treatment of goitre, the author believes that the injections of various substances to excite sufficient inflammation to obliterate the vesicles of the gland, or to have some solvent action on the colloid contents, is not devoid of danger. Iodine is far preferable to every other substance, yet its injection has been followed in a number of cases by death. Internal administration of remedies is briefly discussed and dismissed. The use of setons was wisely abandoned long ago.

A noteworthy series of cases has been reported by Rydygier, of Cracow, in which ligature of the superior and inferior thyroid arteries on both sides has been performed. In sixteen cases the results were excellent, although the operation is a difficult one, and the patients have not been watched for sufficient time. Cystic or fibro-adenomatous goitres are less likely to be benefited by such ligation. Division and resection of the thyroid isthmus have been less successful; the operations have been followed by death in some cases, or the dyspnoea, for the relief of which the operation was done, was unimproved. Total extirpation of the gland is not recommended on account of its grave dangers. Partial extirpation has been done by Berry, frequently with good results. Mukulicz's resection, which consists in removing the chief part of the lateral lobe, avoiding the recurrent laryngeal nerve by leaving the portion of the gland adjacent intact, has the advantage that it leaves sufficient gland tissue to prevent cachexia strumipriva, avoids hemorrhage and injury to the recurrent laryngeal nerve, and removes the capsule of functionally useless gland tis-
sue. There has never been a return of the goitre in the portion of gland in twenty-three cases operated upon according to Mukuliez's method, nor impairment of health, although one case died of recurrent hemorrhage and one required a tracheotomy.

In five hundred and fifty cases of partial thyroidectomy only six present symptoms of cachexia strumipriva; five of these recovered and one died. In cases of cachexia strumipriva, transplantation of thyroid tissue, as done by Kocher, Horsley, and Ferwick, can be tried. Pilocarpin, jaborandi, and nitro glycerin should be of service. In malignant goitre no operation but tracheotomy is advisable. Kocher has reported the results of two hundred and fifty consecutive operations on goitre, with a mortality, if malignant and exophthalmic goitrous disease be eliminated, of 0.8 per cent. Cachexia strumipriva is the most important remote effect of thyroidectomy. The existence of this remarkable affection following the operation was drawn to the attention of the profession in 1883. Its recognition had a great effect in modifying views held in regard to thyroidectomy. Berry believes it can be avoided by performing partial thyroidectomy.—Univ. Med. Magazine.

CLINICAL STUDY OF THE CONDITION OF THE HEART IN TYPHOID FEVER.—Dr. L. Galliard ( Archives Générales de Médecine) took careful notes of the anomalies in the condition of the heart during an epidemic of typhoid fever in Paris, in 1859, while he was interne under Professor Hayem in the Saint Antoine Hospital. He had delayed publishing the notes, as he had hoped to have made further investigations on the subject, but circumstances prevented him. He simply gives the clinical notes of the cases as they were taken at the time.

The first case was one of sudden death at the end of the first week of the disease. The patient was progressing favorably, the temperature 37.8° C. in the morning and 40.2° C. in the evening, when he became delirious, and after a short time died. No cause could be found in the post-mortem examination to account for the death.

The second case was one of collapse on the thirteenth day. There had been profuse diarrhea, and the temperature, from 39.5° C. on theeleventh day, gradually sank to 36.1° C. in the armpit, and 37.4° C. in the rectum on the thirteenth. He presented all the appearance of a cholera patient, with cold extremities, livid face, almost pulseless, and no heart sounds to be heard. Under stimulating treatment he gradually recovered.

The third and fourth were cases of non-rhythmic intermitten of the pulse, the third exhibiting the intermission only on the day of entry [the eighth of the disease]. There was a murmur [systolic?] at the apex and at the base of the heart. In the fourth case the intermissions continued from the eighth to the twenty-fourth day. There was slight albuminuria.

The fifth was an anemic girl, in whom rhythmic intermissions occurred after deferentscence—from the twenty-fourth—and lasting three weeks. There was also systolic murmur at the apex and in the pulmonary area. In the sphygmographic tracings there occurred an occasional double pulsation. The patient had also a slight relapse.

The sixth case was at first simply asthenic, with feebleness of the apex beat and of the heart sounds. There were intermissions on the twenty-fourth day, when the fever was abating. Pneumonia ensued and the patient died. There was myocarditis.

The seventh case had intractable diarrhea. At the end of the third week there was feebleness of the heart and faint first sound. Later, at the apex, the first sound could scarcely be perceived, while heard distinctly over the sternum. There was also inequality and irregularity in the pulse beat. The patient died suddenly about the end of the fourth week. Myocarditis and vitreous degeneration of the voluntary muscles were found.

In the eighth case there were systolic murmurs at the base and apex observed on the eighth day of the disease, disappearing on the tenth from enfeeblement, and the patient died on the twelfth. There was myocarditis.

The ninth case was somewhat similar to the eighth.

In the tenth there were anemic murmurs that persisted after recovery, and the author points out the necessity to distinguish anemic murmurs from murmurs arising in cases of myocarditis.

The next three cases are examples of the true cardiac form of typhoid fever. There is a general resemblance in all these cases, intermissions of the heart's actions coinciding with the murmurs, or following upon the diappearance of the heart's sounds, and feebleness of the apex beats. Toward the end the heart's action becomes irregular, accompanied by tachycardia, and is premonitory of a fatal termination, and finally syncope, preceding death. There were also complications in the lungs, kidneys, nervous system, etc. In the three cases given myocarditis was demonstrated in each one.

The last two cases of endocarditis, the murmurs appearing in the one case on the eighth
day and persisting after recovery, and in the other case acute endocarditis was diagnosed before the symptoms of typhoid fever developed, the murmurs persisting here also after recovery.

The author concludes with a few remarks on the causes of the cardiac phenomena, pointing out that, in addition to the local mischief, affections of various nerve centers would account for some symptoms. In treatment he strongly recommends the judicious and bold use of digitalis.

ON LEUCODERMA SYPHILITICUM.—Following Professor A. I. Pospeloff’s suggestion, Dr. Fivesky, of Moscow, has carried out an extensive series of elaborate clinical observations, mainly upon prostitutes, inmates of the Missnishsky Syphilitic Hospital, in order to study the clinical history and diagnostic value of “leucoderma syphiliticum.” The outcome of the author’s important and exhaustive research may be summed up somewhat as follows:

1. Leucoderma syphiliticum, or “primary pigmented syphilide,” constitutes a very common cutaneous manifestation during the condylomatous stage of syphilis. Most frequently it is localized on the lateral and posterior surfaces of the neck, but sometimes, besides those classical regions, it may also affect the lateral aspects of the chest, the epigastic region, and, though exceedingly rarely, the thighs. It never attacks either the hairy scalp or face, the inner surface of the mamma, the buttocks, forearms, hands, legs, or feet.

2. There exist three distinct varieties of the exanthem, which may be termed leucoderma marmoratum, l. maculosum, and l. retiforme (“lace-like form”).

3. In forty per cent of cases the rash makes its appearance during the third month after the first syphilitic symptoms (concerning which point, as well as some others, Dr. Fivesky differs from Dr. Ehrmann; vide the British Journal of Dermatology, August, 1889, p. 346), in twenty per cent during the fourth, in twenty per cent during the fifth, and in the remaining twenty per cent in the course of the second half of the first year.

4. Occasionally it may be observed simultaneously with gummatous manifestations.

5. In women, leucoderma occurs more frequently than in men. Thus it is observed in from forty-five to forty-nine per cent of all female condylomatous cases, and only in twenty-eight per cent of male ones. [Prof. Fournier found the rash in fifty per cent of female patients and in thirty-five per cent of male.]  

6. In some cases the exanthem proves to be limited to a certain isolated area, while in others it may occupy a more or less extensive cutaneous territory.

7. In men the extensive form is met with nearly thrice as frequently as in women. It is observed in about fifty per cent of all male cases of leucoderma, and only in eighteen per cent of female cases.

8. The disease commences with an increased pigmentation of the skin, usually of the neck. After a while there appear minute circular or oval white patches or islets, which gradually increase in size to attain about that of a six-penny piece. Subsequently the lesions become stationary, to persist for a more or less prolonged period, after which the white spots gradually grow less pronounced, and ultimately disappear without leaving any mark.

9. The duration of the rash varies from one to seven years. Most frequently it lasts three or four years.

10. In the case of a relatively late development the manifestations of leucoderma are usually mild.

11. An intense rash of the kind, as a rule, develops in such patients as either have not undergone any mercurial treatment about the beginning of syphilis, or in whom the specific treatment has been irregular or defective. In those who have been subjected to an early and regular mercurial treatment, the cutaneous affection commonly assumes a mild form. Neither mercury, however, nor iodide of potassium produces any apparent impression on the course or duration of the exanthem itself.

12. Leucoderma constitutes one of the most characteristic and most reliable diagnostic signs of condylomatous syphilis.

[In the course of a discussion at the meeting Professor Pospeloff stated that, according to his opinion, leucoderma offers even a more common and a more important diagnostic sign of syphilis than enlarged lymphatic glands.]

Prof. A. H. Gay, of Kazan, indicated the possibility of the rash involving the hands as well. Thus he happened to observe a case of a young man in whom, about three years after the infection, a typical leucoderma developed on the dorsal surface of his fingers.

Several years ago Dr. Jebineff, of Kahrkov, also indicated (Sprimon’s Medicine, in 1886, Vol. 2, p. 956) the high diagnostic value of the exanthem. He even laid down the proposition that leucoderma occurs solely in syphilitized persons. According to his observations on twelve prostitutes, the rash tends to spread pari passu with the advance of the convoluted stage of syphilis.

At a meeting of the Sevastopol Naval Medical Society, Dr. Gavrill N. Grivtzoff of Niko- laiiev, read a paper on the subject (Medizinska...
Electricity in "La Grippe."—It is probable that every practitioner of repute in this city (and also in all other large cities) has his own method of managing influenza; and the variety of remedies employed, as seen by the files of the druggists, would lead an acute observer to think that the specificity, as a friend called the disorder, is more apparent than real, and that possibly a less varied and elaborate therapy would do as well in the care of the unfortunate as that now suggested by writers, which includes almost all of the new remedies and a big lot of the older ones.

My own list of drugs has been very small, and most of my cases get well as soon under little medication as those who have been thoroughly soaked with stimulants, antipyretics, sedatives, and deobstructants. Partly because I am using electricity in some form of disease liberally every day, and partly because it is so well adapted to relieve pain, at least temporarily, I have tried what could be done with the different currents in this troublesome affection, and it gave good results in the few instances in which it was employed.

The first instance was that of a woman who had great soreness and pain in every region, but particularly in the legs and back, and with her I used galvanism, both generally and centrally, running the current up to twenty-five milliamperes. The first sitting gave her decided relief; and, with the exception of the cough, which lasted for three days after the other symptoms had disappeared, she was practically well in twenty-four hours after beginning the electricity.

The next patient was troubled with the pain more particularly about the occiput, and had considerable sickness of the stomach and high temperature with it. A galvonic current applied to the nape of the neck (positive) and (negative) to the epigastrium, under an ascending current of thirty milliamperes, relieved the nausea at the first application, and dissipated the weariness and pain at the second, while the cough also was notably improved, ceasing in four days without any expectorant or other drug whatever. This person was unable to rise from bed when I saw her first, and was apparently very seriously ill, yet she lost all of the prominent symptoms in the short time indicated.

The next case was that of a child who suffered distressingly from the throat and chest symptoms, her influenza being as pronounced as in any of the instances in which my patients have been sick for a fortnight or more. I gave her a little fever-mixture and applied galvanism to the pneumogastric—positive to the neck, negative to the solar plexus. The electricity was not given until my second visit, at which time she had not been relieved at all by the medicine taken. The first application shortened the paroxysms of sneezing and coughing fully one half, and the next in the evening still further improved her condition, not alone as to the thoracic symptoms, but in all respects. Half a dozen applications settled the matter, and converted what was apparently a very threatening case into one not at all alarming, and in a week she was out and at school.

The three were typical instances of grippe, and no one could tell from the outset, as far as symptoms were concerned, how bad the trouble might be in the future, yet each did well under electricity alone, for all the medicine aside from the galvanism was inconsequential.

Might I ask my friends who are equipped with suitable apparatus to try galvanism? I am now looking into what faradism and static applications will do in this matter.—W. R. D. Blackwood, M. D., Medical News.

The Action of Ergot as a Hemostatic in Uterine Hemorrhage.—Whatever may be our knowledge at present of the physiological action and therapeutic value of ergot, it is certain that many essential points regarding this interesting drug remained to be clearly explained experimentally and clinically. Opinion appears to be equally divided on the question of the action of ergot upon the circulation, for in looking over the literature of the subject we come across a mass of evidence replete with contradictory statements.

Thus, for instance, in regard to the effect produced by ergotine on the arterial pressure: First, the researches of Vogt, Holmes, Kohler, Eberts, and H. C. Wood, which seem to show a decided increase; second, the results obtained by Herzmann, Borescha, Madelin, and Wernich, showing a lowering of pressure; third, the investigations of Markwald, indicating that blood pressure is neither increased nor diminished.
THE AMERICAN PRACTITIONER AND NEWS

It is well known that ergot or its essential alkaloid exercise in hemorrhage a decided action; that is, under its influence its flow is checked. How this phenomenon is brought about has not been definitely established. Leaving aside, for the time being, a centric vaso-motor influence (an influence which, according to most authorities, is not exercised by the drug), and referring especially to the effects produced by the remedy on uterine hemorrhage, it is apparent that the drug exerts an action on the uterine vessels and nerve structures. This appears to be sustained by the recent experiments of Ellinger. In normal conditions, it has been found that asphyxia causes peristaltic contractions of the uterus, that they are even observed in curarized animals, and that they are prevented by previous section of the spinal cord. Asphyxia under these latter circumstances is powerless to excite the organ into activity. On the contrary, ergot, which, under ordinary circumstances, is able to act upon the uterus as an oxytoic, retains the same power after previous division of the medulla spinalis—an indication that the action of the drug is a peripheral one. Ergot acts, therefore, directly upon the spinal cord or uterus; that it is upon the latter seems evident in the fact that it produces contractions in the excised organ. This admitted, the drug, to diminish hemorrhage, must directly influence the uterine muscular fiber itself or else produce constriction of the arterioles. Neither view, however, is accepted by Ellinger, and following the opinion of Markwald, referred to already, to the effect that under the influence of the drug the blood pressure remains intact, he regards the hemostatic action of ergot under a new and certainly untenable light. He believes that the remedy acts upon the blood itself, rendering it coagulable at more or less susceptible points of the vascular system.

The most recent and a very valuable contribution to the study of the actions of ergot is that of Hemmert, published within a few months. The experimental investigation was carefully carried out by the author, and from the results obtained he finds, among other facts, that ergot increases the blood pressure, diminishing at the same time the number of cardiac pulsations. The increase was generally preceded by a primary fall of pressure, the unusual rise occurring not only in normal animals but also in those in which the heart was previously isolated from all nervous connection by section of the pneumogastries and spinal cord. These results appear to corroborate those observed by Holmes, Eberts, Wood and others, and it is evident that the rise of arterial pressure is dependent upon an action of the drug upon the heart or on the arterioles. From a purely physiological point of view, if the arterioles are made to contract, the blood pressure rises, but, at the same time, the increased pressure stimulates the vagi centers in the medulla oblongata, in consequence of which the pulse-rate falls, and thus we have the curves of the pressure and the pulse running in opposite directions. When this takes place it is assumed by physiologists that the change in the pressure is due to the arterioles. This is precisely what occurs under the influence of ergot, according to Hemmert, and he, therefore, concludes that the drug produces an increase of the arterial pressure by an action upon the arterioles and not upon the heart.

Practically we know from clinical experience that ergot is not only an excellent oxytoic, but a most valuable hemostatic; that it does good in almost all kinds of hemorrhages. But the question at issue, whether this influence is due to the action of the drug on the arterioles, as is generally held, or whether it is due to an alteration on the blood itself, as is believed especially by Ellinger, remains unsettled, although it seems clear that the view of Ellinger is incorrect.—Medical and Surgical Reporter.

THE TECHNIQUE OF MASSAGE.—The forms of diseases to which Zabludowski directs attention with reference to the use of massage, are:

1. Traumatic neuritis, with scars from the original injury, productive of nerve disturbances, that is to say, cases in which an individual changed by disease, reacts in an abnormal fashion to the bodily ailment.

2. Affections of the peripheral nerves; (neuritis and perineuritis) especially of traumatic origin.

3. Nervous dyspepsia with constipation, increased formation of gas and tenderness of the abdomen, caused by displacement and pressure upon the intestines, with or without a floating kidney.

In cases of traumatic neuritis in which the simple touching the scar produces a severe pain, Zabludowski recommends leaving the injured spot entirely alone at first.

One should begin the mechanical manipulation as far as possible from the scar and should work gradually from the center toward the periphery. At each treatment gradually approach the neurotic field, and thus, in three or four treatments, it will be possible direct to seize the scar without producing any irritation which tends to the development of cramp or similar effect. In cases in which massage works very promptly, the result is to be explained by psychical influence. In diseases of the peripheral nerves (neuritis and perineu-
ritis, paralyses of single nerves and muscles) which occur especially in the extremities, it is desirable to effect the resorptive processes and to establish a "dynamic effect." Zabludowski recommends here a method which enables us to influence the deeper structures without much irritation. This is intermittent pre-sure which is exercised by the hand of the masseur making centripetal rolling motions.

In conclusion Zabludowski describes a method which he applies for constipation due to atony of the bowel, whether it be with general nervous phenomena, or with severe pain and distension of the abdomen, high fever and giddiness. Inasmuch as we have to do with a local mechanical obstruction to the movement of the intestinal contents, a mechanical treatment is naturally the one which first attracts attention. Zabludowski conducts massage according to a method of his own, which requires the knee-elbow position.—Review in Schmidt's Jahrbücher.

Intubation in 1890-91.—A year ago Professor von Ranke published statistics of 413 cases of intubation, collected from German, Austrian, and Swiss (German) sources, and compared them with 866 tracheotomies collected from the same sources, and performed within recent years. He now reports (Münchener medizinische Wochenschrift, October 6, 1891) 365 cases of intubation performed for diphtheritic croup in Germany, Austria, and Switzerland during the past year. Of these cases 94 were his own, and the remainder were performed by the six following operators, namely, Ganghofner, Jakubowski, Von Muralt, Unterholzer, Schwa'be, Bagin-ky, and Escherich. He has also presented for comparison 237 cases of tracheotomy performed during the same period by Jakubowski, Steffen, and Unterholzer. Of the 365 cases of intubation 348 were performed for primary diphtheria, and 17 for diphtheria secondary to measles. Of the former 143 recovered, or 41 per cent, and of the latter 5 recovered, or 29.4 per cent. Among the whole 365 cases, therefore, there was 148 recoveries, or 40.5 per cent. It must be stated, however, that tracheotomy was performed in 83 cases, or in nearly a fourth of the whole number, after intubation had been tried. Of these 6 eventually recovered, and it is not quite accurate to include these among the recoveries obtained by intubation, as Von Ranke appears to have done. Of the 237 cases of tracheotomy which he collected, 78 recovered, or 32.8 per cent. The results of intubation are, therefore, superior to tracheotomy, so far as these statistics are concerned, and there is a decided improvement in the results of intubation over those shown in Von Ranke's former report. On that occasion the recoveries from intubation were 34 per cent, and from tracheotomy 38.1 per cent, so that the relative position of the two operations is reversed. The author attributes the better results to the greater experience which operators now possess, and to the improved tubes which are now employed. He attributes his own improved results in no small degree to the fact that he now leaves the thread in place, and has recourse to the extractor for the removal of the tube only in exceptional cases. He thinks it a great advantage that, with the thread in place, the nurse is able to remove the tube when there are signs of it being blocked, and he has noticed that after its removal in such cases more or less membrane is often expelled, and the breathing is easier for a time. He lays stress on the fact that ulceration from the pressure of the tube is now very rarely found, and this he believes to be due to the employment of properly constructed tubes.—British Medical Journal.

Intubation of the Larynx in Laryngeal Diphtheria, with Notes of Five Cases.—The operation of intubation of the larynx as now performed consists, as is well known, in the introduction per vias naturales of a metal tube so constructed that its upper extremity or head rests upon the ventricular bands and between the arytenoid cartilages, while its stem extends downward through the glottis into the trachea. Any obstruction to the breathing located in the larynx will thus be cleared by the tube.

The operation appears to have been first performed by a French surgeon, but it is to Dr. O'Dwyer, of New York, that credit is due for having established it on a practical basis. By careful experimentation and accurate measurements this investigator has succeeded in devising a set of instruments and a series of tubes appropriate to various ages, and it is with these instruments and tubes that the operations in the cases now to be recorded and commented on were performed.

In O'Dwyer's operation the child to be operated on is firmly enveloped in a blanket or sheet. He is then held by the nurse in the semi-erect position, with the head reclining on the left shoulder. A mouth-gag is then inserted in the left side, and firmly held, along with the child's head, by an assistant. The operator now selects the tube appropriate to the age of the patient, passes a thread through the eye in its head, attaches it by means of a screw in its pilot or obturator to the inserting instrument or applicator, and then, standing on the right side of the patient, endeavors, with the assistance and under the guidance of the left
index finger passed through the mouth and hooking up the epiglottis, to insert it in the larynx. The insertor and obturator are now detached by means of a sliding arrangement in the handle of the applicator, and the tube alone is or ought to be left in the larynx. The operator now waits a few seconds or possibly minutes, in order to decide whether the tube has been properly located in the larynx or has been passed into the gullet. If successful, a beneficial effect on the respiration is almost immediately manifested, and a peculiar metallic or clangy cough is developed, which when once heard can not be mistaken. Should, however, the tube not have been properly placed in the larynx, as evidenced by the absence of the peculiar cough and of relief to the respiration, it must be withdrawn by making traction on the thread, and another attempt at insertion made. It may be here remarked that beginners usually require to make several attempts before succeeding. If the operation has been successful, the thread is either withdrawn, care being taken while doing so to steady the tube by the left index finger, or is left attached, in which case it may be taken across the cheek and fixed around the external ear. While the maintenance of the thread adds to the irritation experienced by young patients, and aggravates the difficulty in swallowing by making traction on the epiglottis, it is probably better and safer for one who has not had much experience of the operation to allow it to remain attached, as by it the removal of the tube is greatly facilitated.

The length of time during which the tube ought to be left in the larynx varies somewhat with the nature and indications of each case, but as a general rule it may be said that it ought not to be allowed to remain longer than twenty-four hours without being withdrawn for purposes of examination and testing the respiration. If necessary, it can then be reinserted. To permit of removal, the patient is put in the position already described for the operation. The extractor is passed in the same manner as the applicator, and in such a way that its tapering extremity projects into the upper opening of the tube. A lever is then depressed by the right forefinger. This fixes extractor and tube, and both are withdrawn. If the thread has been left attached, the use of the extractor is not necessary, as simple traction will suffice to remove the tube.

In theory the operation is simple enough and of easy performance, but in practice it will occasionally be found beset with some difficulties. These may be in connection with the insertion of the tube, with its dislodgment by coughing, with its blockage, with its interference with swallowing, and with its removal, more especially when the thread has been detached or been bitten through by the patient. A careful consideration of these difficulties and drawbacks, and more particularly of the advantages or disadvantages of the operation as compared with tracheotomy, is incumbent upon all, for there is no practitioner who may not at some time be suddenly brought face to face with a case of laryngeal diphtheria necessitating the performance of intubation or tracheotomy. The following notes of cases, with comments, are submitted as a contribution toward the solution of these important points:

1. Girl, aged eight years, 12th December, 1888. The patient had been suffering for several days previously from what seemed at first to be acute tonsillitis, with considerable fever (evening temperature 105°). The tonsils and adjoining parts of the pharynx were greatly swollen. On the 8th a patch of ulceration with membrane appeared on the right tonsil, which on the following day extended to the left; invasion of the larynx on the 10th; urgent dyspnea and intubation under chloroform on the 12th. The first two attempts were unsuccessful. The third succeeded, but the thread attached to the tube having been caught by the insertor on its withdrawal caused displacement of the tube. It was immediately and finally reinserted and the thread withdrawn. The patient died twenty hours after intubation. The leading features after the operation were relief of the breathing, aggregation of mucus in the larynx or tube, and difficulty in its expectoration; swallowing fairly satisfactory, with the occurrence of occasional spasm during the act and marked failure of the pulse some hours before death.

This was the first case in which I performed intubation, and is the only one in which I administered an anesthetic. After further experience I found that with efficient assistance it could be done very easily without anesthetizing the patient. The second unsuccessful attempt to introduce the tube was due to the patient's head being placed too low, and to the tube becoming prematurely detached from the obturator, partly owing to faulty construction of the instruments. This case indicates the necessity of keeping clear of the thread on withdrawal of the insertor, otherwise displacement of the tube is bound to ensue. The relief to the breathing afforded by the operation in this case was not complete, and death resulted, partly from respiratory obstruction and partly from cardiac and general exhaustion.

It may be added that the mother of the patient died during the following week of laryngeal diphtheria, for which tracheotomy was performed. On comparing the results of the
respective operations in these two cases I was inclined to think that intubation gave the greater relief, and was productive of the less discomfort.

2. Child, aged twenty-one months, 1st March, 1889. I was asked by Dr. P. A. Young to see this case, and if necessary to perform intubation. The child was reported to have been "croupy" for a day or two. Now there were marked laryngeal dyspnea and stridor. No. 2 tube was introduced on the third attempt. The breathing was immediately relieved, but inspiration was not so satisfactorily performed as one could have wished. The thread was not detached from the tube. The child was reported to have gone on fairly well until four hours after the operation, when sudden profuse hemorrhage from the mouth and nose set in, and death immediately ensued. On inspection after death the tube was found lying in the oropharynx, blocked with coagulated blood. Membrane was found in the larynx, and erosions of the left inferior (posterior) laryngeal artery and vein were found.

The fact of the tube being found in the oropharynx was due to the attempts of the nurse to remove it after death by pulling on the thread. Regarding the hemorrhage, if, as seems probable, this came from the eroded vessels, it must be regarded either as an incident of the disease or as a result of the operation. If the latter, it must have been from pressure of the lower extremity of the tube upon the vessels. On experimenting with the tube I found that when in situ its lower extremity did not correspond with the locality of the erosions, and I therefore came to the conclusion that the disease itself was the cause of the bleeding. The appearance of the erosions also favored the idea of their being due to a non-traumatic, ulcerative cause. Blocking of the tube by blood was doubtless the immediate cause of death in this case. If, as in this case, sudden accession of dyspnea occur when the tube is in the larynx, it ought at once to be removed, examined, cleared of any obstruction that may be present, and reinserted if necessary.

3. Boy, aged three years, 11th March, 1889, under the care of Dr. Hamilton Wylie. The child had been suffering from diphtheria of the pharynx for about a week. The disease had now extended to the larynx, as indicated by the signs of marked laryngeal obstruction. Great restlessness was present. Intubation was followed by immediate and complete relief to the breathing. 14th March—morning: The patient has breathed continuously well since the operation (three days). There is, however, a good deal of difficulty in swallowing, and the temperature keeps high (evening 105°, morning 104.5°). The pulse is quick, regular, and weak.

Evening: The patient died at 8:30, after the supervention of great and sudden difficulty in breathing. An inspection was not permitted. The tube was found almost completely blocked with thick, glutinous, almost membranous material, which was removed with difficulty even after maceration in hot water.

There can be little doubt that in this case the tube was permitted to remain too long in the larynx without removal for examination and cleansing purposes. It was my intention to have removed it in about twenty-four hours after the operation, but the breathing continued so satisfactorily as to induce me to refrain from disturbing it and let well alone. As in the preceding case we have the child suffocated from blockage of the tube, an occurrence which I now think ought to happen very rarely or not at all. The result was rendered all the more disappointing by the fact of the breathing having continued so good from immediately after the operation until just before death.

The high temperatures were partly due to a pulmonary complication (catarrhal pneumonia) which was present before the operation.

4. Boy, aged ten years, 31st March, 1889, under the care of Drs. McLeod and McEwan, Dundee. There was the usual history of progressive laryngeal stenosis, but the cause of this was at first somewhat obscure. Intubation was performed at 8 p.m., the tube being properly inserted on the first attempt. The breathing was immediately relieved, but did not become quite free until several hours after the operation. 1st April: pulse 120, temperature 103°. The patient had passed a good night and had swallowed very fairly indeed. He received some antipyrin and was stimulated freely.

2d April: The patient continued to progress satisfactorily, the pulse was better, and the temperature had fallen two degrees. He had nutrient enemata and was still stimulated freely. At 7 p.m. the tube was removed. 3d April: Temperature normal, breathing easy, and patient quite comfortable. He had passed a quiet night and had slept quite well. 5th April: I was recalled to Dundee this afternoon, and found a relapse had occurred. The breathing was again obstructed, expiration being particularly prolonged and labored. I again inserted the tube, which was twice expelled by severe attacks of coughing. Very little relief to the breathing followed. The patient gradually sank, and died on the 7th, one week after the first intubation, with all the signs of obstructed respiration. On inspection of the larynx, etc., after death, firm diphtheritic membrane was found extending from the glottis through the trachea into the bronchi.
Nothing could have been more satisfactory than the progress of this case after the first operation. The downward extension of membrane to the bronchi, indicated during life by the peculiar laborcd wheezy expiration and by the auscultatory phenomena, accounted for the absence of relief after the second operation, and would have rendered equally nugatory any other surgical procedure, such as tracheotomy.

5. Boy, aged four and one half years, 30th May, 1859, under the care of Dr. Henry Hay. Diphtheria of the pharynx and larynx, with great laryngeal obstruction. Intubation was performed. Some difficulty was experienced in getting the tube corresponding to his age properly located in the larynx, and it had ultimately to be withdrawn and a smaller one inserted. The tube was coughed up after having been in position for one hour. It was allowed to remain out for three hours, but the laryngeal dyspnea having become more intense the larger tube was again tried, without, however, appreciably affecting the breathing. The thread was left attached to facilitate removal of the tube should it again have been coughed out of the larynx. The child died four hours afterward. Autopsy revealed diphtheritic membrane in the larynx, especially about the vocal cords, the epiglottis, and the infraglottic region. The tube could not be found in the larynx, pharynx, or mouth, but was discovered in the gullet, close to the stomach. As the result of a series of post-mortem experiments, it was found that the insertion of the tube in the larynx was not easy, principally on account of the membrane, which was very abundant about the aditus laryngis.

The leading feature in this case, apart from the general result, was the swallowing of the tube. The thread was left attached, for the reasons already stated, and was bitten through by the patient. The tube must either have been expelled from the larynx by coughing, or it must have been drawn out by traction on the thread. From one or other of these causes the tube changed from the larynx to the pharynx, and was swallowed. Similar cases have been recorded by other observers. In some of those the tubes were expelled per annum. From the fact that the patient swallowed milk with great ease during the last hour of life, I am inclined to suppose that the accident must have occurred shortly before death.

This case is that in which I experienced the greatest difficulty in inserting the tube appropriate to the age of the patient, and of this the abundant membrane at the entrance to the larynx was evidently the principal cause. I am now of opinion that it is a mistake to persist with intubation under such circumstances, and that recourse should rather be had to tracheotomy. Had this been done in the present instance the locality of primary obstruction would have been cleared, and greater relief would constantly have been afforded to the patient.—Dr. G. H. Mackenzie, in Edinburgh Medical Journal.

The Contagiousness of Common Warts. Dr. Payne, from his own experience, furnishes an instance in support of the widespread belief that common warts are transmissible from one person to another, as well as from one part of the skin to another. When treating a boy who had a very copious eruption of warts, which had apparently spread from and originated in a very large and horny one on the palm of the right hand which had existed more than two years, he inoculated himself. When the warts were rendered soft and crumbling by the methods adopted, he found the process was accelerated by scraping them away with the back or handle of a scalpel. On one occasion he thoughtlessly used his thumb-nail to assist the operation. After a few days he noticed some redness and swelling under the nail which had been thus used, and in about a week an unmistakably horny wart appeared on the spot, then a second and a third on the back of the same thumb. These disappeared in a few weeks without treatment. So far as he could recollect he had never previously suffered from warts. He thinks warts are produced by the implantation of some contagious material at one or more points of the skin; this may be favored by want of cleanliness, but they are not due to this latter cause alone. There is also some degree of idio-syringery, as many, though exposed under similar circumstances, escape. In treatment the collodion of salicylic acid does not always succeed. In this case the application of some light caustic, such as acetic acid, either concentrated or diluted to half-strength, several times a day is a good plan.—British Journal of Dermatology.

The Treatment of Alopecia Areata.—Dr. Prince A. Morrow holds that evidence is in favor of alopecia areata being caused by a specific germ. Though this has not so far been isolated, yet whatever may be the micro-organism the pathological result is an impairment of the nutrition of the affected areas. The clinical phenomena—the smooth, pale patches, the amnic skin, the collapsed hair follicles, and the arrest or suspension of their function—all point to the participation of the nervous system in their production. While neither food nor medicine exercises, so far as we can distinguish, any direct specific influence upon the nutrition.
and growth of the hair, yet we know that local nutritive processes are favorably influenced by hygienic and therapeutic measures which invigorate the general health and improve the general nutrition of the system. Especially in cases where the disease is generalized and protracted the effect of local treatment may be materially aided and energized by the exhibition of tonics and reconstituent remedies. In all cases where there is evidence of a loss of nerve tone he is accustomed to give the phosphate of zinc and strychnia—a combination of phosphorus, iron, and strychnia, or phosphoric acid with strychnia. But it is at the same time unnecessary to subject strong, robust individuals to a methodic general treatment if the patient's general health is good. Constitutional treatment is of subordinate importance. The principle of local treatment may be summed up in one word, stimulation. In the simpler, more benign cases, where the patches are limited in number and circumscribed in extent, the hair round the margin of each is to be closely clipped. This permits of a more thorough inspection, while it facilitates the application of remedies. As the disease always advances by peripheral extension, the hairs in this "zone of protection," as it has been termed by Be-nier, are subjected to a modified form of epilation. The hair should be grasped lightly by the forceps and, if it yields readily, should be extracted. If it resists moderate traction, the grasp of the forceps should be relaxed, and the hair allowed to remain. This tentative traction is an excellent test for the detection of dis-eased hairs, and should be frequently resorted to during the course of treatment. In recent cases he is accustomed to use chry-arobin, eight to ten per cent, and salicylic acid, two to five per cent, in trumatin or lard—the latter method insures more thorough penetration. This should be applied every three or four days in sufficient strength to excite and maintain a moderate dermatitis. In cases where the disease is severe and more extensive, covering the greater part of the scalp, the hair should be cut closely or shaved, and the entire surface should be treated with acetic acid mixed with chloroform or ether. He usually employs a mixture of equal parts, the relative proportion of the acetic acid being graduated to suit the reactive peculiarities of the tissues, which vary in different individuals, and even in the same individual at different stages of the disease; ordinarily a strength sufficient to produce the white nitrate of silver tint is employed. This superficial vesication is followed by a slight exfoliation of the epidermis. In the intervals between these applications—which are repeated two or three times a week at first, and continued at longer intervals during the entire course of treatment, and which should be made by the physician, and not intrusted to the patient—a stimulating oil should be applied once a day. This is composed as follows: Oil of eucalyptus, oil of turpentine, each half an ounce, crude petroleum and alcohol, each one ounce. The application of this oil is to be followed by a thorough massage of the scalp for five minutes, which the patient can be instructed to perform. This massage, besides aiding the penetration of the oil, is an effective stimulus to the scalp. Once a week, or oftener, the head should be shampooed with the tincture of soft soap. At a later stage of the disease he replaces the oil by sulphur ointment, either with or without resorcin. Daily douches and frictions with salt water are also advantageous. In alopecia affecting the hairy structures of the face he also uses the acetic acid, but the strength must be modified to suit this more sensitive surface. As, however, the redness resulting is apt to persist, and the exfoliation is unsightly, he more commonly advises daily friction with tincture of cantharides, or tincture of capsicum, in an equal quantity of glycerine. For alopecia of the body the extensive surface contra-indicates the use of active irritants, and milder measures are fortunately sufficient. The use of mercurial and tar soaps and the employment of sulphur baths are the only measures necessary. Such is the outline of the method of treatment which he has employed for some time with invariably satisfactory results.—Journal of Cutaneous and Genito-Urinary Diseases.

Mediastino-Pericarditis in Children.—Dr. Henry Ashby reports two cases of this interesting condition, and discusses the pathology and possible results of mediastinal inflammation. The loose areolar tissue in the mediastinum is very apt to become implicated in inflammatory processes affecting either the glands, the lungs, the pleura, or the pericardium. At the post-mortem, it may be impossible to say in which organ the mischief began, and which were only secondarily affected. The chronic inflammatory thickening which results causes matted together of the thoracic organs, and this leads to serious interference with the circulation. This interference may be brought about in several ways. The heart may be hampered in its action by adhesions of the pericardium either to it or to the surrounding structures; and these prevent effectual systole, and consequently complete filling of the arterial system. Again, the movements of the thoracic walls may be restricted by the adhesions, and this may prevent the large veins being properly
emptied by inspiration. Lastly, the large veins of the thorax may themselves be constricted by the fibrous tissue, or they and the aorta may be compressed by the dragging of adhesions during inspiration. If the circulation be interfered with in one or more of the above ways, we have over-filling of the venous system, edema, and sometimes ascites. The greatest effect, however, is on the liver, which, owing to the constant state of congestion in which it is kept, becomes enlarged and "nutmeg," and ultimately is affected with a form of secondary cirrhosis. The early symptoms are vague and indefinite, and usually nothing attracts attention until ascites develops. On examination this may be all that can be made out, or there may be some edema of the face or fullness of the veins of the neck, suggesting obstruction to the return of blood to the lungs. Sooner or later the liver is found to be enlarged; there is evidently portal obstruction, but without obvious cause. Some of the cases are very chronic; they are relieved by tapping, and last for months, even for a year or two, but in the end more or less general edema occurs. Others are much more acute in their course, especially the tubercular ones. Examination of the front of the chest sometimes reveals an increased area of dullness, but sometimes there is no abnormality discoverable. A weakening of the pulse with deep inspiration is said to occur in these cases; but this symptom is not always found, and was not present in either of Dr. Ashby's cases.—Med. Chronicle.

**Hydrochloric Acid in Diphtheria.**—The experiments of Roux and Versin have established that the virulence of diphtheritic toxins may be greatly diminished by adding to the products of the secretions of the bacteria a small quantity of acid. Starting with this idea, Dr. Krazenski has employed hydrochloric acid in the treatment of six cases of croup in children from six months to three years of age, and in five cases of diphtheritic angina, two cases occurring in children and three in adults.

The following formula were employed:

- Perchloride of iron.............. 1 dram;
- Medicinal hydrochloric acid...... 15 minims;
- Distilled water.................. 6 ounces. M.

Sig: Take at first one teaspoonful every fifteen minutes for four doses, then every thirty minutes for three or four hours; finally, the dose is repeated every hour.

- Perchloride of iron.............. 2 drams;
- Hydrochloric acid............. 15 minims;
- Distilled water.............. 4 ounces. M.

Sig: Apply locally to the parts every two hours, in diphtheritic angina.

In addition, the author employed gargarisms, with a solution of boric acid (4 per cent), and in cases of croup a solution of sulphate of copper (1.5 per cent), taken internally as an emetic when the necessity arises.

In eleven cases the duration of the treatment varied from two to five days. All the patients recovered. Of the five cases of diphtheritic angina, in four cases the false membranes disappeared at the end of from twenty-four to forty eight hours. In the fifth case one week elapsed before the cure. The cases of croup were cured in from three to five days.—Translated by Dr. A. E. Roussel in the Times and Register.

**Hysteria in Infants and Children under Two Years.**—M. Ed. Chaumier, of Tours, read a paper on this subject at a recent meeting of the Académie de Médecine in Paris. He thinks that in very young children hysteria is often overlooked and mistaken for other things. Its symptoms vary according to the severity of the attack. When very slight, it takes the form of frequent causeless attacks of passionate screaming. In more marked cases the limbs become more or less rigid, and the face purple and congested, and sometimes these symptoms are accompanied or followed by tremor. When more severe, the child suddenly begins to cry, and loses consciousness completely; the body is usually stiff and the mouth wide open, but sometimes the body is quite flaccid. In some cases these attacks come on in the middle of a fit of coughing, and they are apt to be mistaken for false croup. He also describes a more aggravated form of the disease, in which the symptoms resemble those met with in adult cases. The child loses consciousness and becomes quite rigid, with its eyes turned up, and the stiffened limbs may twitch or they may be thrown about widely. In other cases the body is quite flaccid and inert. Sometimes such attacks occur at short intervals; they are then often mistaken for meningitis. Hemie-thesia and hyperesthesia may exist, but they are almost impossible to make sure of; but contracture and paralysis can not be overlooked, nor can the absence of the ocular and pharyngeal reflexes, which M. Chaumier has frequently observed. The prognosis is favorable. Recent investigations prove that hysteria is more easily cured in the infant than in the adult; and there is reason to believe that the earlier the treatment is begun the more likely it is to be successful.—La Semaine Médicale.

**Eczema of the Lips.**—Dubreuilh points out that there are at least four forms of eczema which attack the lips: (1) The commonest is the vesiculiform eczema of the upper lip, which is often associated with chronic rhinitis. (2) The
elephantiasis-like eczema of the upper lip, seen in young strumous persons. (3) A form described by Kaposi, which is especially seen in elderly women, attacking particularly the red portion of the lip, with the formation of fine cracks and blood crusted, and accompanied by pretty severe itching. (4) The seborrhoeic eczema of the lips. This appears as small red spots on the red of the lips and adjoining parts, but soon becomes a general redness, with the continual formation of small transparent scales, resembling healthy and dry epidermis, becoming readily moist on their under surface. There is complaint of heat and tension. The epithelium assumes a yellowish hue and separates in thicker, larger flakes, often attached in the center, while the margins are free. Under these new epidermis forms which passes through a similar process. It is persistent and obstinate. Unna ascribes eczema seborrhoeicum to a functional disturbance of the sebaceous and coil glands; but Dubreuilh thinks the causation must be sought elsewhere, since these glands are absent on the lips. This form of eczema is specially apt to recur, and a treatment which seemed efficacious in one outbreak may prove powerless in a second. He has had good results with tar and sulphur, while Kaposi employs liquor potasse as a caustic. Hallopeau scarifies such cases, and Brocq uses an ointment of napthol and yellow oxide of mercury. Several illustrative cases in which the same form of eczema existed elsewhere are cited.—Monatshefte für Prakt. Dermatologie.

Infantile Scurvy.—Prof. Pott, of Halle, reports two cases of scurvy with subperio-teal hemorrhages in infants. Both patients were girls, and both occurred in his private practice. In neither case were the hygienic conditions such as to explain the scurbytine taint, and both children were carefully nursed and fed. In the first case the child was thirteen months old when first seen. She presented the usual symptoms of infantile scurvy—a dirty gray complexion, very profuse sweating, extreme pain on the slightest movement, spongy, bleeding gums, loss of appetite, recurrent diarrhea, tense and painful swelling of both tibias, with low temperature. There were no signs of rickets. After improving a little for some weeks, she got rapidly worse, and died. The other child began to show scurbytine symptoms at nine months, and recovered after nine or ten weeks' illness. She showed most of the above mentioned symptoms, and also had recurrent attacks of edema and ecchymoses of the eyelids. She differed from most cases of this condition in suffering from persistent constipation, and also in having for many weeks a painful afebrile swelling of both knee-joints; this symptom appeared about a month before the periosteal hemorrhages, which in this case affected the femora. As to treatment, Prof. Pott believes strongly in the value of sunshine and fresh air, regular bathing, and careful milk diet. He gives small doses of iron, but does not believe much in citric acid. He mentions with approval the use of the juice of the cloud-berry (Rubus chamaemorus), which is recommended by Dr. Nordenskjöld.—Münchener Medizinische Wochenschrift.

The Treatment of Scrofuloderma and Lupus.—Dr. Broode has somewhat modified the method of treating lupus by an ointment of oleate of mercury, salicylic acid, and ichthyoil, which he published a year since. Finding in some cases the original formula too strong, has reduced it, combined it with Lasar's paste, at the same time adding sufficient red Armenian bole and raw umber to match the color of the skin:

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<th>Ingredient</th>
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<tr>
<td>Zinci oxidi</td>
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<td>Amyli pulv.</td>
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<td>Vaselinii albi.</td>
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<td>Hyd. oleats.</td>
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<td>Acid. sauleylici.</td>
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<td>Ol. lavendula.</td>
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M. Fiat ung. coloratum.

This, when well rubbed in and then covered with potato-starch powder, completely disguises the disease, and attracts very little attention. He sometimes diminishes the salicylic acid and increases the ichthyoil. The action is most rapid in cases of scrofulodermic tumors and ulcerations, but is also pronounced in those in which lupus has developed from the scrofulodermic basis. In pure lupus the effect is distinctly weaker, especially in those where there is much sciero-is or old scarring.—British Journal of Dermatology.

The Percentage of Albumen in Urine.—I was much pleased to read in the Medical News G. M.'s criticism of the careless habit prevailing among medical men of speaking of the percentage of albumen in urine. I have written and spoken so much upon the subject that I hesitate to take up the matter again lest it be regarded tiresome, although I seem to have made a very limited impression. It is true, as G. M. says, that the blood contains but eight per cent of albumen; and as the albumen of albuminuria comes from the blood, more than eight per cent is impossible, whereas in point of fact two and a half per cent is about the maximum noted. What the writer meant, of course, was fifty per cent of the bulk of urine
tested. As the time, trouble, and apparatus
required render it practically impossible for
the vast majority of physicians to use the grav-
imeteric method for albumen, and as appliances
like Ebsch's albuminometer are inaccurate,
we must for the most part continue the meth-
ods of measurement by bulk, which is indeed
sufficiently accurate for all practical purposes.
If men will only say twenty-five per cent or
fifty per cent of bulk, as it may be, they will
be beyond criticism, although I think it better
to retain the percentage expression only for
weight, and to speak of one quarter bulk or
one half bulk, as it may be.—Dr. James Tyson,
Medical News.

TREATMENT OF ESSENTIAL PAROXYSMAL
TACHYCARDIA.—Dr. Huchard (Rivista Clinica
et Terapeutica, No. 14, 1891), recommends phy-
sical and moral rest, lying upon the left side or
back, with the head low, slight compression of
the right or left carotid. The chloride of
methyl spray, vesicatories or the cauterry may
be applied to the back of the neck. During the
attacks digitalis by the rectum, on account of
the gastric intolerance, will be of service. In-
jections of caffeine or ether are useful in the
cardiac weakness. Nitrite of amy1 and trinit-
rine are contra-indicated. During the intervals
the patient should abstain from coffee, tea,
liquors, exciting substances and tobacco. The
general treatment is physical and moral rest,
and the use of arsenic as a nerve. In tachy-
cardia, with arterial hypotension, the writer
advises the sulphate of quinine with ergot in the
following formula:

| Quintus sulph. | Extr. aquos. secal. a a gm. 4 | 5 j |
| Extr. nuc. vomio. cgm. 10 | 5 j |

Sufficient for forty pills.
Two pills two or three times daily for fifteen to thirty days.

As a prophylactic, the writer recommends
digitalin, taken morning and evening for three
weeks, fifteen drops of a solution, 1–1000, of
crystalized digitalin.

CURES FOR DRUNKENNESS.—There appears
to be some excitement in Illinois at present
over the gold cure for drunkenness. Chloride
of gold is said to be the remedy, and the West-
corn Druggist says there is little new about
that, for a Dr. Gray, of La Porte, Ind., prac-
tices the following method of cure regularly.
When he receives a patient he sets in his room
a bottle containing a pint of good whisky, in-
structing the patient that he can take all he
wishes. The doctor immediately commences
and gives him four hypodermic injections each
day, each containing one tenth of a grain of
the chloride of gold and sodium, and one for-
tieth of a grain of nitrate of strychnine, and
gives a mixture to be taken by the mouth con-
taining the same with some atropine. The
formula for the mixture is:

| Sodium auric chloride | gr. xj |
| Ammonium chloride | gr. yj |
| Strichm. nitrate | gr. j |
| Atropine | gr. j |
| Fl. ext. cinchona compound | 5 j |
| Fl. ext. cocoa | 5 j |
| Glycerine | 5 j |
| Water | 5 j |

Mix, and take a teaspoonful every two hours when
awake.

He sees the patients four times a day, and
rapidly increases the gold and strychnine until
the symptoms show that they are getting all
they will bear. The first day the patient drinks
pretty heavily of the whisky in his room. The
second day he begins to lose his desire for it.
By the evening of the third day or the morn-
ing of the fourth he is totally sick of it, and
will not take any more. The treatment is car-
ried on from three to six weeks. It seems to
be a great success.

We are frequently asked what Haines' gold
en specific is. A formula for producing a pow-
der said to resemble this preparation was con-
tributed to the Druggists' Circular some time
ago, and is as follows (Chem. and Drug.):

Bark of bayberry root | 16 parts |
Ginger | 8 " |
Capsicum | 1 " |

Reduce to a fine powder and mix thoroughly.

TREATMENT OF PNEUMONIA IN DIABETICS.—
Dr. Merklen (Gazzetta degli Ospitali, No. 56,
1891) regards pneumonia as one of the most
dangerous complications of diabetes. It ap-
ppears in diabetes without any initial chill,
pains, or dyspnea. Sometimes its presence is
marked by intense dyspnea, due to congestion,
which may become so severe as to kill the pa-

tient in one to two days—the fulminating dia-
betic pneumonia of Bouchardat. It may ter-
minate in pulmonary abscess or gangrene, yet
all cases are by no means fatal. The writer
narrates a case where the sugar disappeared
from the urine at the beginning of the disease,
to reappear during convalescence. The same
was true of the polyuria; hence in such cases
the reappearing of the polyuria and sugar in
the urine are favorable signs. In his case there
was no albuminuria. The writer pre-
scribed caffeine, 1 gram (15 grains) a day hypo-
dermically, as a diuretic and heart-tonic; two
or three quarts of milk daily, and 1 1/2 grams
(22 grains) of the sulphate of quinine, together
with revulsion to the chest.
TREATMENT OF UREMIA.—Professor Tissier (Gazzetta degli Ospitali, No. 25, 1891) recommends:

1. Lavage of the stomach.
2. Inhalations of oxygen.
3. When the vomiting threatens to interfere with the nourishment of the patient, one to two drops of tincture of iodine in a spoonful of water are indicated. Creosote and menthol have also been successfully used. Leorcche and Telamon have succeeded in arresting the incoercible vomiting by lactic acid:

- Acid lactic \(\text{m m}_{\text{xx-xxx}}\);
- Syrup menthe piperita \(\text{fl.}_{\text{vi}}\);
- Aqua destillata \(\text{fl.}_{\text{vii}}\).

Bouchard advises rigid intestinal antisepsis.
4. For the treatment of the cerebral and nervous symptoms he advises: For the ecstacies, chloroform by inhalation, chloral, the bromides — preferably the sodium bromide, bromide of potash being contra-indicated on account of the potash it contains — para-delylhyde, opium and its derivatives, administered with caution on account of the impermeability of the kidneys and their tendency to accumulate.

Rosenstein and Rosbach use the nitrate of sodium:

- Solidi nitrat. \(\text{gr.} \times \text{xxx}\);
- Syrup cortic. aurantii \(\text{fl.}_{\text{vi}}\);
- Aqua. \(\text{fl.}_{\text{vii}}\).

Two to three teaspoonfuls daily.

Labaudre, Lagrange, and Huchard recommend amyl nitrite, which, however, is contra-indicated when there are vascular changes pre-ent.

5. In uremic asthma tincture of eucrbacho or aspidospermin are to be recommended. Leorcche and Talamon regard venesecton and morphine as the true remedies in this stage. Intravenous injections of sodium salts are useful. If the heart be weak with dyspnea, then use such heart tonics as caffeine, adonidine, digitalis, and camphor.

EXCISION OF THE Apex OF A TUBERCULOUS LUNG.—La Gazette Médica de Granada reports a case of the successful excision of the apex of a tuberculous lung by Dr. Tuffieri, who prior to the operation had satisfied himself of its safety by a series of experimental operations on the lower animals. Cutting through skin and some fibers of the pectoralis major, Dr. Tuffieri laid bare the intercostal muscles of the second intercostal space, and cutting through these he exposed the parietal layer of the pleura, which he detached from the thoracic parietales. Opening the pleura, he found the lung apex studded with tubercle and slightly shrunken. Round the apex he passed a ligature, which he attached to the second rib, and then excised five centimeters of the tuberculous mass. The patient was on his recovery exhibited before the Surgical Society.—Med. and Surg. Reporter.

QUININE POISONING.—Dr. A. Erlenmeyer reports, in the Centralblatt für Nervenheilkunde, a case of poisoning with this drug which is of some interest. The author had previously observed abolition of the reflexes in several patients who were taking large doses of quinine, but in the case under consideration the symptoms were those of an intense reflex irritability. The patient, aged forty-two years, had taken at one dose a gram of quinine (about fifteen grains), and on the following day two grams in divided doses. Examination of the reflexes at this time, by tapping and the other tests, brought on general convulsions, with violent contractions of the arms and the whole body. Leaving off the medication for twenty-four hours would cause a disappearance of the nervous excitability.

DIPHTHERITIC ALBUMINURIA AND NEPHRITIS.—Dr. Joseph Kuck summarizes the results of his observations on these subjects, in 436 cases of pure diphtheria, as follows: (1) Albuminuria is met with in about 86.5 per cent of all the cases of diphtheria occurring in Munich. (2) The earlier the albuminuria appears, the more severe is the diphtheria and the worse the prognosis. (3) There is no constant relationship between the albuminuria and the temperature. (4) Formed elements are but rarely found in the urine, and post-mortem the kidneys appear normal in the great majority of the cases. (5) When there is much albuminuria and nephritis, streptococci are generally found in the kidneys. (6) Rare cases of diphtheritic nephritis with edema and uremia do occur, but hematuria is extremely seldom met with.—Münchener Medicinische Abhandlungen.

FRAENKEL’S PNEUMOCOCCUS IN SUPPURATIVE PROCESSES.—Dr. Nannotti’s observations go far to prove that the pneumococcus can give rise to true abscess in connective tissue, either before, during, or after the evolution of a pneumonia. The author relates four instances: one of abscess of the submaxillary region, one of the mastoid region, one of the tissue surrounding a tooth, and one of the perineum. The pus was carefully collected and found to contain only diplococci, and cultures showed the only micro-organism present to be that of Fraenkel. Experiments on guinea-pigs showed all the special changes caused by the pneumococcus, of which the encapsulated appearance was typical.—Il Morgagni.
Oil of Peppermint as an Antiseptic in Ear Troubles.—During the past three years Dr. B. Pientkowski (Deutsche Med. Zeit.) has been using oil, menth. pip. as an antiseptic in ear troubles, and he reports that it is superior to the other antiseptics now in use. After the ear has been cleansed with a five per-cent solution of sod. sulph., a five per-cent solution of the oil, menth. pip. in alcohol is injected several times, and a tampon soaked in the same solution is inserted and allowed to remain twenty-four hours.

In the most obstinate cases he found that the discharge lessened, and in some cases even ceased within two weeks. He claims the following advantages for it: (1) It does not in the least irritate the mucous membrane. (2) On account of its antiseptic properties and easy diffusibility it stops the process of suppuration. (3) It is absolutely safe. (4) It is not objectionable on account of any bad odor.

Mercury in Typhoid Fever.—From a study of nearly 700 cases, Smakovskv concludes that the simplest and most efficacious treatment consists in the administration of calomel in fractional doses. Three fourths of a grain is given every hour for ten doses, if necessary, or till copious, soft, greenish stools have been secured, a gargar of chlorate of potash being meanwhile used to prevent stomatitis. In cases in which cardiac weakness already exists, an infusion of digitalis is used before the calomel. A second course of calomel may be given a day's interval after the first. During the interval and subsequently, the author prescribes:

Subnitrate of bismuth.........gr. iiss;
Pure naphthaline..............gr. 3-10;
Sulphate of quinine ........... gr. iss. \( ^{\text{M}} \).
Sig. One powder. Four of these daily.

An Inquiry into the Blood and Urine of the Insane.—In the Journal of Mental Sciences for October, 1890, Dr. J. Smith notes the lessened proportion of hemoglobin among the insane, this peculiarity being greatest in cases of secondary dementia. It is not particularly marked in melancholia, general paralysis, and epilepsy. In spite of diminution in hemoglobin and red corpuscles the specific gravity of the blood is increased, indicating abnormal density of the plasma. The quantity of urine is great in general paralysis, reduced in secondary dementia, about normal in other forms of insanity, and apparently lessened in melancholia. Urinary solids exist abundantly in general paralysis, and are much diminished in secondary dementia, the other forms of mental disease presenting nothing unusual in this particular. Uric acid is excessive in general paralysis, epilepsy, and dementia. There appears to be a slight excess of phosphoric acid in epilepsy.

Osmic Acid in Goitre.—Dr. S. Auerbach relates the case of a young woman of twenty-five suffering from goitre (the variety and dimensions not stated), in which he resorted to a "combined method" of treatment, including (a) a parenchymatous injection of a solution of osmic acid, one grain to two drams of distilled water, a syringeful once daily or every other day; (b) local massage for fifteen minutes, once daily; and (c) the internal administration of iodide of potassium. By the end of three weeks all subjective symptoms disappeared, while the tumor was found to have greatly decreased in bulk (was half the size compared with the period before the treatment). Unfortunately the woman was subsequently lost from sight.—Ietopis Khirurgitcheskago Obshchestwa Moskve.

Ether Spray and Cocaine.—Schleich (Deutsche Medicinal Zeitung, 1881, No. 44) recommends the previous spraying with ether of any part in which cocaine is to be used. It must last half a minute, after which time one can employ numerous injections of cocaine—not more than 0.01-0.03—cocaine being necessary to make large areas completely anesthetic. This same method is to be employed in cases where division of deeper layers is necessary, each one being treated in turn, as was the skin. In this way the author has made small resections and bone operations without giving any pain.—Med. and Surg. Reporter.

The Bromides and Increased Susceptibility to Infection.—In the Mercedé Médical, October 21, 1891, Dr. Féré takes up the assertion that patients undergoing bromide treatment are more susceptible to infection than others, particularly to the influence of Koch's bacillus. Upon this latter point there are no positive clinical evidences within the author's personal observation, yet during epidemics of pneumonia at the Bicêtre those persons under the influence of bromides proved most vulnerable. Animals inoculated with tuberculin virus after large doses of bromide began to lose ground immediately, and soon died.

White of Eggs for Sore Nipples.—Dr. Frank Van Allen, in the New York Medical Journal, speaks of the good effect of painting the nipples several times a day with the white of egg. The albuminous covering is soothing, and under it the nipple heals.
THE DOCTOR'S FEE WHEN CALLED TO SEE THE DEAD.

It is said that one of our professional local lights of the days of our fathers once told his class, in lecturing on the causes of sudden death, that one day he was summoned in great haste to see a patient whom he had under treatment for puerperal septicemia, and that "repairing to the house with as much celerity as was compatible with professional dignity, he found his haste had been in vain, the patient having just died!" Now, just such experience is a too solemn item in the practice of every doctor, and doubtless many a conscientious man, while not questioning his right to pay for his trouble, has asked himself if it was right to charge the full fee in such cases. It may be allowed that some question may be raised, on the above grounds, as to what is right; but it is necessary to go to the coroner, and the English coroner at that, for such precedent as The Lancet gives in the following item:

"Holding an inquest on the body of George Day, who refused to see a doctor till within a few hours of his death, it transpired that Mr. Dodd had been sent for. As he could not go, he referred the messenger to his assistant, who could not attend. Three other doctors being unavailingly applied to, the messenger returned to Mr. Dodd, who went. The patient was by this time dead. Mr. Brickwell gave evidence of such extensive and chronic disease as precluded recovery under any circumstances. The coroner is reported to have made this remarkable observation, that if Mr. Dodd was able to attend on the second occasion, he was upon the first. This is a most gratuitous and illogical assumption for a public man to make, though it seems to have carried the jury with it. There was more common sense in his remark that doctors would be more prompt in their attendance if they had some security for eventual payment. The medical man is the only person who, according to common notions, is bound to be at everybody's beck and call without hope of fee or reward. There is no propriety in such doctrine."

And so say we! It is a remarkable fact, and one for which the profession is itself responsible, that the average layman seems to have been reared under the belief that the doctor has no rights that his clientele are bound to respect.

They select their own time to call on him or to send for him, and expect him to dance attendance upon their calls without reference to his personal convenience or professional engagements with others who need his attention. He, if their seeming need say nay, is to have no time for recreation, meals, or sleep, and must run at their call in all kinds of weather whether sick or well; and if he can not comply with the unjust demand, he finds that some other doctor has succeeded to his case, and often to the future practice of the family.

There are two causes for this flagrant injustice. One is lay ignorance. The other is sycophancy, and an almost total disregard of ethical obligations of physicians to one another on the part of not a few prominent practitioners.

We have a code of medical ethics, and in that code are set forth certain obligations which the patient is under to the doctor, and it is the physician's fault if his clientele are not educated in these important matters. At the same time there may be found in the same document some pretty clear statements as to physicians' duties to one another, and the medical societies of the land ought to see that their members are not permitted to violate this part of the code. It is very euphemistic to say that gentlemen need no code; but can it with truth be said that only gentlemen are permitted to hold the doctorate?

The Emperor of Austria has conferred a patent of nobility on Prof. Böhm, the Director of the General Hospital of Vienna.
OBITUARY.

Surgeon William H. Long, of the U. S. Marine Hospital Service, died January 5, 1892, at Cincinnati, of gastritis. He was born October 5, 1842, in Spencer County, Kentucky. His father was Dr. Josiah Long, of Mt. Eden, Ky., who died in 1852. Dr. Long was raised on a farm, and early contributed to the support of his widowed mother and four brothers and sisters. He was the eldest of the children. During the winter months he taught school and read medicine of nights under the preceptorship of Dr. A. B. Coon, who had succeeded to his father's business.

In 1861 Dr. Long enlisted as a private in the Sixth Kentucky Infantry, U. S. Volunteers, and took part in the battles of Shiloh, Stone River, Mission Ridge, and Chickamauga, and in the Atlanta campaign. He served his country a little over three years, when his regiment was mustered out of the service. He then returned to Kentucky, took up his studies, and was graduated as Doctor of Medicine in the Kentucky School of Medicine in 1866, in the University of Louisville in 1868, and in Bellevue College of Medicine in 1870.

After practicing in Shelby County until 1870, he came to Louisville, having married in 1873 Cassandra, youngest daughter of Randolph Clark, Esq., of Jefferson County. Two children were born of this union, and both survive their parents, Mrs. Long having died a few months before her husband.

In 1875 Dr. Long entered the U. S. Marine Hospital Service as Assistant Surgeon, being stationed at Louisville. In 1878 he was appointed Surgeon in charge of the hospital here, succeeding the late Dr. Thomas J. Griffiths, whose assistant he had been.

He was afterward transferred to Detroit, to Chicago, again to Detroit, and finally to Cincinnati. At each of these posts Dr. Long was the senior medical officer of the service. He was prominently identified with the American Medical Association, and was a member of the local medical societies in the different cities where he was stationed. At Louisville he taught in the summer school at the University, at Detroit he was Emeritus Professor of Military Surgery in the Michigan College of Medicine and Surgery, and at Cincinnati was Professor of General and Genito-Urinary Surgery in the Polyclinic.

He was a surgeon of fine ability, with an unusually successful record in herniomy, an excellent executive officer, and a warm-hearted, loveable man. He leaves many sincere friends in and out of the profession he ornamented.

W. M. G.

Notes and Queries.

Psychologic Aspect of the "Keeley Cure."—There are some facts connected with this so-called "cure" that are worthy of the consideration of the medical profession. There are other phases that need but little investigation to warrant utter condemnation. Only a brief consideration of the medicinal agents used is necessary; it does not matter much just what agents are used. The sciences involved in the education of the liberal physician have something of a materialistic tendency, and we as a profession are prone to consider as of prime importance tangible material and obvious agencies of forces.

But we must not overrate the potency of material agents, neither must we ignore forces and agencies that we are cognizant of only by the light of reason and logic. It is not necessary to go over the ground of the pathologic anatomy of alcoholism. The physician knows the structural changes in the various organs and tissues of the body brought about by the habitual use of alcohol. He also knows that structural alterations in the brain, spinal cord, liver, kidney, and heart are not overcome by any medicinal, mental, or moral methods of treatment.

As to the therapeutic application of the salts of gold, there is no new field of applicability. This auriferous element has without doubt more potency in the hand than it has in the stomach or in the circulation. The gold salts are acknowledged to be inferior to the iron salts in therapeutics. From a study of the physiologic action of the terechloride of gold, Hoffman, twenty years ago, conceived the idea that it would be of use in alcoholism,
but careful and honest experiment and clinical use failed to give any evidence of a utility greater than that possessed by the iron salts. From time to time the medical profession has had its exacerbations of "auric fever," but it has always been a self-limited disorder.

Who knows that in the so-called "gold cure" gold is used at all? A patient is injected with a solution, but who knows its analysis? The patient receives hypodermic treatment, and ceases to have an appetite for spirits. Why? Is it because the solution of some salt of gold circulating in the system has restored normal function to a cirrhotic liver, or rendered an inflamed stomach more anemic, or caused a cardiac hypertrophy to disappear? Is it because a human being, weakened physically, mentally, and morally by alcoholic excess, is suddenly converted by having a drug administered to him? Nothing like this. Nothing new or occult. There has been no newly-discovered potency whereby we can so easily set at naught nature's decrees. The pathologic changes brought about by excesses are not to be remedied in a day or a month by any agent at our command or that we shall ever command. There are effects, however, produced by drugs on systems thus deprived. It is a well-established therapeutic fact that certain drugs for a time lessen the craving for alcohol.

Hypodermic medication of certain cerebral and cardiac stimulants, such as strychnine, atropine, cocaine, and digitalin, will stimulate the cardiac and nervous system to a degree sufficient to render alcohol superfluous and even objectionable to the patient. What, then, are the important factors that Keeley uses? For we do not question but he has effected cures of dipsomania. Whether the patient lapse again it does not matter, unless the lapse is immediate. If a person affected with dipsomania has his appetite allayed for a year, it is fair to say that he is cured so far as the craving is concerned.

We all know the mental condition of the inebriate. All physicians have seen the poor unfortunate one upon the verge of delirium. They have seen how the intellectual faculties and perceptions are blighted. They have seen manhood shorn of its glory. They have seen that apathetic dependence on the decrees of fate, that intellectual inertia consequent upon frequently repeated stimulation, and it is a psychologic fact that a mind thus weakened is more susceptible of receiving and accepting suggestion than one in possession of natural moral and mental vigor. The susceptibility of the human mind under certain conditions of accepting suggestion is known to every observer of life. We know that changes in belief may be brought about, and even sensations due both to functional and organic disease may be so far ignored or forgotten as to cease to be sensations.

We will not go into the details of hypnotism or hypnotic suggestion, except in so far as it has to do with the subject in hand. The phenomena of hypnotism were never so clearly understood by the scientific world as they are to-day. It is the province of psychology to reveal the laws governing these phenomena, and it has been the function of this branch of science to lift the veil of obscurity, remove the charlatanism, and dispel the dogmas that have clung to this department of mental science for many years. With the fair-minded there no longer remain the delusions with which the mesmerists of one hundred years ago surrounded the phenomena of hypnotism. We now disclaim magnetism as a factor in the production of the hypnotic state, and deny that only a certain few persons, who claim to be endowed with extraordinary will power, are capable of inducing hypnosis. We no longer use the magic wand or the "luminous shadow" of Lord Lytton to induce somnambulism or catalepsy.

The authority alone of reputable specialists is sufficient indorsement for the facts of suggestion, and there are scores of men that have seen epileptic seizures prevented, the hallucinations of melancholia relieved, and paralyses of months' duration immediately overcome by simple verbal suggestion.

But there is nothing in this beyond the comprehension of common mortals, if they will honestly consider all of the circumstances. If by a simple word of command a cerebral tumor that gave rise to epileptiform seizures had disappeared, or had trophic changes in an atro-
phied muscle been thus brought about, then we could justly consider such powers with awe, for we might then consider them supernatural. But the modern physician is denied any such supernatural power. The therapeutic application of hypnotic suggestion depends for its exercise upon an exact knowledge of definite but not occult physiologic and psychologic functions that any person of fair intellectual attainments can possess.

As suggestion is the factor in the production of the hypnotic state, so it is capable of producing a state of susceptibility entirely apart from lethargy, somnambulism, or catalepsy. This fact was pointed out by the school of Nancy many years ago. The therapeutic application of suggestion has as a basis the fact that many diseases of a functional nature can be cured or relieved by making the patient believe that a cure will be effected if the advice given is followed. In other words, we induce a state of credulity. And this fact is the explanation of another, one that is as old as disease, and as well known to every physician as the phenomena of respiration, viz., that the specific treatment of certain diseases is moral, and that, whatever else it may be, any form of medicine is a placebo. But it is necessary that this state of credulity be induced, and there are cases in which it is impossible for the physician to implant this faith without first using some material means of producing an impression on the system, though the effect may have no direct bearing on the disease to be cured. These are the facts taken into account in the recent methods used in the cure of dipsomania.

In his rational and sober moments the poor unfortunate sees his downfall, he sees the "handwriting on the wall," and he is willing and anxious to be restored to manhood, to family, and society. He will avail himself of any opportunity for such restoration.

He goes to this wonderful healer and receives his injections, and mirabile dictu! his thirst is lessened. The stimulants have done the initiatory work. The heart that has contracted feebly without alcoholic stimulation now pulsates more strongly under the effect of higher potencies. His tremor is lessened, and this he sees and takes courage. He feels that he is to be cured, for others have been cured in the same way. His mind throws off its lethargy, and he is all hope and determination. After a few such stimulating injections, together with the assurance of friends and of the physician, he believes, beyond any possibility of doubt, that he is to be free from desire for alcohol. He is convinced that alcohol is a poison and has no use in the animal economy.

That cures of dipsomania have been effected by Keeley we do not deny. That the hypodermic injections are a factor in the cure we do not deny; but we assert that the chief factor is suggestion.—*Medical News.*

*Editors American Practitioner and News:*

As the majority of the members of the Mississippi Valley Medical Association read your most excellent journal, permit me through its columns to make a few suggestions which I think worthy the attention of the members. That the Mississippi Valley Medical Association stands second only to the American Medical Association as a scientific body is perhaps admitted. It is at least a fact that the rapidly increasing scientific interest of the Association and the number of active workers that are becoming members of the same have made it impossible for the Association to properly conduct the scientific interest of the meetings with justice to herself as a body, and to her members as individuals, under the present system. That the time is fully ripe when the Association should be divided into at least two sections, Surgical and Medical, I believe will be admitted by every practical member. That the necessity for such a division was apparent at the last two meetings I think was clear to the mind of every interested gentleman in attendance. The day has dawned upon us when the man that employs his time and talent in the department of surgery, and chooses to write and read a paper on a subject purely surgical, can not feel the same interest and competency in discussing a purely medical question; and he that makes it his life-work to attend the sick as a practitioner of medicine, and chooses to write and read a paper on a purely medical question,
can not feel the same interest and competency in discussing a question purely surgical. Hence the necessity for the division into two sections in so large an association if we would encourage each department to their fullest development.

The division will tend to bring about that cordial recognition of each man's ability in his department of the science of medicine, and will encourage the development of that noble principle that should ever exist in the profession, a courteous and proper appreciation of each other's merit, and the true relation of the surgeon to the physician and the physician to the surgeon, which can only be accomplished through the work of medical associations in our larger annual meetings as well as in our local society work.

The necessary result of efficient work in medical associations, both local and general, is the attainment of a higher standard of medical education, and whatever legislation we have secured as a protection to the people and the profession has resulted from such work.

It must be admitted that it is impossible to have read and profitably discussed all the papers that are presented at the meetings of the Mississippi Valley Medical Association under the sessions of one section. We are all aware of the fact that often even a well-written paper becomes of real value only by virtue of the discussion that follows its reading. Then let us have a Surgical and Medical section in the Mississippi Valley Medical Association, because we have outgrown our ability as an association to successfully take care of its interests otherwise.

The members have ample time, from now till the meeting at Cincinnati, to thoroughly settle this question in their own minds, and the matter can then be adjusted with but little loss of time. Then have the banquet on the evening of the last day of the meeting, and our success would be phenomenal.

J. F. PURDOM.

THE DEPOPULATION OF FRANCE.—During the year 1890 there were 38,000 more deaths than births reported in France. This very large diminution was, in part, due to the influence. It has been computed that the time required to double the population, according to the rate of increase of the last year, is, in England 53 years; in Germany 77 years; in Russia and Italy 99 years; in Austria 139 years, and in France 230 years. In France not only are there fewer marriages, but the age at which marriages takes place has advanced so that now the mean age for men is about thirty years and for women twenty-five years. The average number of children is three.

EXAMINATION OF THE EYES OF THE INSANE. M. Roget, of Lyons, states that there exists in the greater part of the general paralytic a characteristic rigidity of the pupil. Besides excavation of the papilla, quite frequent in the normal state, should be regarded as the rule in those hereditarily predisposed, and in the insane who exhibit evidences of suicide. Finally, idiots and imbeciles, in respect to visual function, may be classed in two categories: The hypermetropic idiots are those whose infirmity dates back to uterine life. On the contrary, myopic idiots have become demented since infancy.—Med. and Surg. Reporter.

POISONOUS AMERICAN APPLES.—The Horticultural Times, of London, has demanded of the Board of Trade that the importation of American apples be forbidden, because apple trees in America are sprayed with Paris green to protect the fruit against the coddling moth. It has been shown, however, that but one pound of Paris green is used to one hundred and fifty gallons of water, and that the spraying is done while the apples are very small, and that the amount of poison which could possibly remain on ripe apples is practically nothing.

AMERICAN HOG PRODUCTS IN FRANCE.—According to the new Custom House Law, American ham and bacon can be imported into France through the ports of Dunkirk, Havre, Bordeaux, and Marseilles, where consignments will be examined by experts whose services will be paid for by the importer. These experts are to be appointed by the Minister of Agriculture. No American meat will be
allowed to pass the Custom House unless it has been examined and certified as sound by the inspectors in question.

Dr. W. Talbott Owen, one of the oldest practitioners of Louisville, and one of the noblest and best of men, died at his residence, January 17, 1892. He was the eldest son of Dr. J. H. Owen, and was born November 23, 1829, at Fort Gibson, Miss. His father removed to Louisville in 1852, and in this city Dr. Owen received his education and continued to reside. He entered upon his medical studies as the private student of the late Samuel Gross, afterward graduating with high honors from the University of Louisville in 1848. Dr. Owen was at one time Professor of the Theory and Practice of Medicine in the Kentucky School of Medicine. He was a member of several medical societies, in which he was always a prominent figure. He was a graceful speaker and an able logician.

Resorcin in Laryngeal Pithitis.—Dr. Tymowsky considers resorcin the most convenient of all local applications, because it gives no pain, and need only be applied once a day. The solution must be of the strength of one hundred per cent in cases of unhealthy-looking ulcers which are undoubtedly of tuberculous character. At the same time inhalations of from two- to five-per-cent solution of resorcin may be substituted for those of cocaine.

The Körösi Prize.—Dr. Joseph Körösi, of Buda-Pesth, has offered the sum of $300 as a prize for the best essay on the objects of demography and its progress in the chief countries of Europe and America. The competition remains open until January 1, 1894. The award will be made at the opening meeting of the next International Congress of Hygiene and Demography, at Buda-Pesth, in 1894. The essays may be in either the English, French, German, or Italian languages.

Antidote for Hydrocyanic Acid.—Professor Kobert has proved experimentally that hydrogen peroxide is a valuable antidote for hydrocyanic-acid poisoning. It is to be given internally as well as subcutaneously until the odor of the acid can no longer be recognized in the exhalations and the symptoms subside.

In the last issue the Southern Medical Record announces a change in its editorial staff; Dr. William Perrin Nicholson and Dr. F. O. Stockton retiring, and the places which have been so ably filled by them will in future be supplied by Dr. J. McFadden Gaston and Dr. Willis F. Westmoreland.

The Ohio State Asylum for Epileptics, now in course of erection at Gallipolis, is the first institution of its kind in this country. Of the large number of epileptics in Ohio about one thousand are expected to enter the new asylum.

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SPECIAL NOTICES.

The Terraline Company, Washington, D. C.

Gents: Your preparation, Terraline, has given such perfect satisfaction in our city that we had a through discussion of its merits at the meeting of our Medical Society last night, when it was endorsed by our entire fraternity. G. D. Parker, M. D.

Mckinney, Texas, February 21, 1891.

I have used your preparation of petroleum called Terraline in quite a number of cases of catarrhal afflictions of the respiratory organs, and can assure you that it is a most useful and valuable remedy in all such complaints. My experience in general with it has been such as to induce me to recommend it to my professional friends.

B. Segnitz, M. D.

No. 149 East 68th Street, New York.

Wm. K. Griffen, M. D. Daniels, S. C., says: I was induced to try your Celerina in my own case, having been troubled with periodic attacks of neuralgia for several years past, during which time I tried different remedies for relief, but with no permanent good effect. Having now used nearly a bottle of Celerina, I am thoroughly satisfied with its remedial effects in this particular affliction, and truly thankful to say its results have been most excellent and gratifying in my case. Since I commenced the use of Celerina my attacks of neuralgia have been less frequent, intervals much longer, and my nervous system greatly benefited by its tonic influence. As a nerve tone I esteem it very highly, and without any exaggeration feel fully justified in saying it is an invaluable therapeutic agent, and can cheerfully recommend it to the medical profession as one of the very best nerve tonics. Pleasant, soothing, and agreeable to the taste, it is emphatically a most excellent preparation, a sine qua non in every case.

Depression of Opium Habit.—

R

Tinct. Capsici.......................... ½ oz;

Con. Tinct. Atome........................ 1 oz;

Celerina [Rb]................................... 01 2 oz.

M. Sig: Teaspoonful several times a day.
REPORT OF A CASE OF TREPHINING FOR DEPRESSED FRACTURE AND ENDOCERANIAL HEMORRHAGE.*

BY S. P. SCHROEDER, M.D.

On March 4, 1891, John E. Sefried, aged twenty-seven, night operator at Louisville & Nashville Depot, Nashville, Ills., was found at 3 A.M. in his room in a comatose condition. He had been struck with a coupling-pin by a villain, but this fact was not certainly known. The nearest physician, an irregular, was called in, and upon counsel with another physician whom he called they made a diagnosis of concussion, sewed up the small scalp wounds, finding one over the external occipital protuberance, and the other over the right parietal eminence.

My duty as member of the Pension Board calling me to Nashville, I saw the patient a little after 10 A.M. on the following day, hence eight hours after the reception of the injury. He was comatose, and had been ever since he was found. The pupils were contracted, and responded slowly to light, but the right pupil was a little larger than its fellow. The eyes had the appearance of one suffering from opium narcosis. They were rolling from side to side. He was nearly constantly moving and tossing about, often raising himself with his upper extremities, when I noticed that he fell more often on his left than on his right side. This was due to slight left hemiplegia. He also raised his hands to his head quite often. Respiration 12 per minute, and only at times puffing and stertorous. Pulse 40 per minute, small and labored; hence the deathly pallor of his countenance. Had vomited during the first hour after he was found, but not afterward, and his urine and feces had not passed since found. The brain symptoms had been persistent during this period. It was impossible to arouse him by any means.

Upon observing these symptoms, without removing the head dressing I made a positive diagnosis of compression of the right side of the brain from hemorrhage or depressed fracture or both, and recommended an immediate operation for its relief. However, the operation was not permitted until 3 o'clock that afternoon, which was thirteen hours after the reception of the injury.

I take this opportunity to extend my thanks to Drs. Carter and McIlvain, members of the Pension Board, Dr. Schmidt, of Nashville, and Dr. Boerner, of Venedy, for valuable assistance rendered during the operative procedure.

The dressing was removed and the right side of head shaved. A contused wound one inch long and in a horizontal direction was observed over right parietal eminence, and just anterior to this I noticed a soft fluctuating tumor in the same direction with the contused wound. The field of operation was well cleansed with water and soap, and then with 1-2,000 mercuric chloride solution. The instruments were placed in a carbolized solution. Instead of sponges we used absorbent cotton pledgets, which I consider far superior to sponges in keeping a wound in an aseptic condition.

Plenty of boiled water, but kept hot about 140° F., was ordered; also iodoform, absorbent cotton, and common bandages. The hands of operator and all assistants were thoroughly washed and cleansed. Patient was now anes-
thetized with chloroform, of which he needed but very little. An incision was made, extending from the anterior branch of right temporal artery to the parietal eminence of the same side, which was through the long direction of the contused wound made by the coupling-pin. A cross incision was made, extending downward in front of left ear. The scalp and pericranium were carefully raised. All hemorrhage from arteries of any size was stopped by torque of the bleeding vessels and the oozing by hot water. A depressed fracture one inch long and three fourths of an inch wide was then observed, which was located in right parietal bone near anterior inferior angle, about one inch from coronal and squamo-parietal suture.

A three-fourths-inch Galt trephine belonging to Dr. Carter was used to remove a button just below the fracture, in order to lift out the depressed portion. On removing this we observed that the fracture was much more extensive than was at first suspected. A clot four inches in diameter and over one half inch thick was removed with finger, spoon, and boric-acid solution. The dura mater was lacerated in two places, the wounds being over one half inch in length, and some of the cortical substance of brain oozed out. From the removal of the clot the hemorrhage started again, which assumed alarming proportions. In order to get to the bleeding vessel I removed several loose pieces of bone in the wound, but the vessel was too far away to manipulate for either compression against bone or ligation, and as the patient's condition became critical I thought it best to close the wound and apply gentle pressure by sewing the wound together and applying a head bandage. The wound was flushed with hot water, but the hemorrhage went on. A drainage-tube was inserted and the flaps closed with silk sutures. Iodoform was dusted over wound and dry absorbent cotton and head bandage applied over this. During the operative procedure the pulse rose from 40 to 90 per minute.

After a reasonable time, when recovery from chloroform narcosis should have been complete, it was yet impossible to arouse the patient from his stupor.

Drs. Carter and Schmidt took the case in charge then, as I live twelve miles from Nash-

ville. I saw him the next day, March 5th. He was semi-comatose, having recognized his father and asked for drink, but when left to himself he would immediately return to his stolid condition. He spoke with a thick tongue, the left side of face and body being slightly more paralyzed than the day before. His urine had to be drawn with a catheter, and his bowels had not moved.

I removed dressing from head, with the intention of washing the clot away which had gathered under flap. I improvised a fountain syringe by placing an eight foot rubber tube into a pitcher of boric acid solution, which acted like a syphon. I introduced the point of a medicine dropper in its free extremity to concentrate the stream. The firmness of the coagulum and the irascibility of the patient, however, prevented us from accomplishing the removal of the clot. I quote now from notes kindly furnished me by Dr. Carter:

Remained stupid March 5th; no fever. March 6th: Temperature 102°, pulse 120; drank a great deal; takes liquid food; urine had to be drawn; bowels acted from an enema; less stupor.

I saw him March 7th at 9 A.M.; temperature 104, pulse 130; had slept some under opiates night before; had two tonic convulsions the night before. Nurse had not observed whether convulsions were more severe on left than on right side. Upon this I removed dressing and reopened wound. The wound had healed or glued together in nearly its entire course except where drainage-tube was left out. A large clot two inches in diameter and black in color was found under flap, which was removed with boric-acid solution from a fountain syringe assisted with the finger. The same day, two hours after the removal of clot, the temperature had fallen one degree, and continued gradually but steadily to fall until, morning of the 11th, the temperature was normal for the first time. The paralysis had increased and continued until March 15th, when left hemiplegia was nearly complete.

March 7th, 6 P.M., began to hicough, which continued without intermission until March 10th, 8 P.M. March 11th, his wound was healing very nicely. A small cerebral hernia about
three fourths of an inch in diameter made its appearance. Patient was perfectly conscious. Diet consisted of liquid beef, milk, and eggs.

The patient made a very tedious recovery; sat up for the first time four weeks after the injury, and then only for a short time; complained of severe vertigo when arising from a horizontal position. His paralysis gradually diminished, being imperceptible after April 15th. The cerebral hernia was left to nature, and it slowly receded to the normal surface. He left for his home near McLeansborough, Ills., April 25th, though the wound had not entirely healed, and he still suffered from some vertigo on rising from a horizontal position.

I regard this case as interesting and worthy of consideration, not only because the tedious recovery and slow subsidence of serious brain symptoms add another link to the already long chain of evidence that makes early operative interference in compression of the brain imperative, be it from depressed fracture or endocranial hemorrhage; but because it also in the main bears out the statement made by most of the great neurologists, that special centers for voluntary motion, for sensation and speech exist, and that they can be pretty accurately mapped out upon the skull. The center for voluntary motion lies in the third frontal convolution and in the anterior and posterior central convolutions. This is proved by a number of experiments on dogs and monkeys, by pathological lesions in the human brain; for example, this case. Also by the fact that the "giant pyramidal cells," being located here, find their analogue only in the anterior horn of gray matter of the spinal cord. This center lies, to map it out on the skull, about two inches posterior to external angular process of frontal bone.

The hemiplegia in this case was complete—face, upper and lower extremity on opposite side from the injury. The facial paralysis was incomplete, as the muscles animated by the upper division of the portio dura were not paralyzed, showing that the lesion of the facial nerve was central and not in the course of the nerve trunk. Why the paralysis (hemiplegia) increased up to the 15th of March is a phenomenon which has occupied my mind somewhat. Was it caused by the immediate pressure of the large clot which changed the relation of the delicate nerve cells and kept them in this abnormal relation for thirteen hours, thereby suspending their power afterward temporarily? This is possible. Or was it caused by the cerebral hernia which slowly came to view and receded again, cerebral hernia being due to inflammation of the dura mater, as a rule, and in this case to some of the cortical substance of the brain perhaps? This is most probable.

There was no aphasia in this case, and this is in accord with the accepted views that the center of speech, in the vast majority of cases, lies in the left hemisphere, the location of speech center being generally determined by the patient's being either left or right brained. This patient being left brained, the center of speech was not disturbed by receiving an injury on the right side of his head.

There was at no time any sensory paresis, and as the center for sensation is located in the angular convolution of the occipital lobe this was to be expected.

According to systematic writers, the most constant and by far the most valuable diagnostic symptom from hemorrhage from the middle meningeal artery is a certain period of time between the accident and the following coma. This symptom, if it had existed, was of no value to us, as the patient was found in a comatose condition on the floor in his office. However, the coma, which was persistent, his automatic movements, slow respiration, which was at times puffing, the slow, labored pulse, the fact that the left side was slightly paretic and the right pupil slightly dilated, and responded more slowly to light and shade, all pointed certainly to compression on the right side; but if I had not found the compression on that side I should have explored the left side, for sometimes the fracture and hemorrhage occur on the opposite side from the injury.

The operation in itself, aside from the injury, does not lower the patient's chances of recovery very materially, and the operation is not a very delicate one. I take it that under antiseptic and aseptic precautions the danger of the operative procedure is almost nil. I am convinced that many of these cases are left to die for the want of an operation. It is better in
these cases to operate, even if the diagnosis were wrong, than to pursue the Fabian course of waiting. A mistake of the former would almost always result in recovery, while one of the latter would almost inevitably result in death. With these facts before us, is it not then almost criminal to wait?

The hiccough in this case was singular. In grave diseases we look upon hiccough as a very serious symptom, especially in inflammations involving the abdominal cavity. The cause of hiccough in these cases is from irritation of the terminal filaments of the phrenic nerves. In this case I think it was due to the disturbance of the center for the phrenic nerves.

Three things are, in my opinion, imperative in all operative procedures upon the brain, viz., stopping of all hemorrhage, if possible, through drainage and asepsis; and if we can not accomplish the last any other way, call to assistance antiseptics.

I am constrained to believe that if the hemorrhage in this case could have been stopped before the wound was closed, and the primary dressing applied, he would not have suffered from the septic infection three days after the operation. The steady improvement after the clot was removed proves that it was the nidus from which septic infection took place.

The contraction of the cicatrix may be the cause of this patient's having epilepsy in the future. If so, an operation on the scar should be considered.

HOYLETON, ILLS.

CHRONIC BRONCHITIS.*

By John B. Cassell, M. D.

By chronic bronchitis we mean an inflammation of the mucous membrane of the bronchial tubes. The origin and history of this disease dates back to the primeval periods of medical history. The most interesting part of chronic bronchitis is its etiology. The causes are divided into predisposing and exciting. Among the most common predisposing causes may be mentioned age, sex, occupation, manner of living, and climatic influences. As regards age, we find that the disease is more common during childhood and old age than during the period of adult life. During the months of February, March, and April, 1882, in San Francisco, there were 65 deaths reported from bronchitis, 37 being children under 5 years of age, 25 adults over 45 years of age, and only 3 between the ages of 30 and 40. During the same months in Chicago there were reported 154 deaths from bronchitis, with about the same ratio. As a rule this per cent is generally conceded, yet if we search the statistics in regard to the mortality report we find that it is very deceptive. When we compare infancy and childhood to old age, we find that it occurs more frequently during old age.

Chronic catarrhal bronchitis occurs more often among males than females. Persons who confine themselves indoors, with a temperature either too warm or too cold, are strongly predisposed to this disease. Too warm clothing on the one hand and too little on the other invites this disease. It is universally conceded that bronchitis prevails most commonly in such countries as are characterized by a cold, damp, and variable climate. Among the most exciting causes may be mentioned exposure to sudden and extreme changes in atmospheric temperature from warm to cold. This is universally regarded as the chief cause of this disease. The changes in atmospheric temperature are seldom productive of disease unless accompanied by high winds and humidity. Many sporadic cases are caused by exposure of limited portions of the cutaneous surface to cool or cold currents of air while the rest of the body is protected. Sudden changing from an exceedingly dry, cold climate to one of intense humidity may be termed another exciting cause. Cold northeast winds also increase the ratio of bronchial affections. Besides ordinary meteorological conditions, bronchitis may be produced by inhaling irritating substances, such aspertussis, roscola, and influenca. Sometimes it accompanies rheumatism, erysipelas, and constitutional syphilis. It may also occur in an epidemic form. The morbid anatomy
of this disease shows the mucous membrane discolored, with varicose veins, tortuous in character; the mucous membrane is softened, elevated, and depressed; the walls are thickened, infiltrated with more or less condensation of the tissues. Exudation is sometimes so great and infiltration so abundant that the caliber of the vessels is encroached upon. There is constriction and intermediate dilatation of the tubes closely resembling cavities. The muscular coat is very much thickened, and sometimes the cartilages undergo calcareous degeneration.

The symptoms of ordinary chronic catarrhal bronchitis differ from those accompanying the acute form chiefly in absence of fever and the existence of much less pain, or feeling of oppression and soreness in the chest. There is impairment of nutrition, shortness of breath, and dyspnea; expectoration is mucous or muco-purulent in character. All these symptoms are aggravated by cold, bad food, bad hygienic surroundings, etc. From a clinical standpoint we will divide this disease into four classes. The first class embraces those patients who have the so-called winter cough, which lasts until spring. This cough is accompanied by only moderate expectoration, very little pain in post-ternal region, and good appetite. The second class includes those who have a violent or severe cough morning and evening, with no pain, and tenderness only just after coughing. Expectoration is sometimes streaked with blood, and muco-purulent in character. There is anorexia, emaciation, and dyspnea; loss of sleep is sometimes present. In the third class there is an excessive flow of muco-pus. The cough is paroxysmal in character and sometimes so violent as to cause patient to throw up his food. The expectoration is very abundant. The fourth class of patients expectorate very little. This scanty expectoration is termed the dry catarrh of Laennec.

The diagnosis in this disease is rarely attended with difficulty, save in connection with phthisis. The evidence of consolidation of lung tissue is essential to the diagnosis of phthisis. So long as bronchitis is accompanied by a temperature of 100° F., and the physical signs show that it is general, phthisis is readily excluded. But if the temperature rises to 103° F. and crepi-
tant râles develop at the apex of either lung, accompanied by dullness on percussion at seat of râles and bronchial respiration, then there is reason to believe that phthisis is being developed. Then, again, if there be gradual loss of flesh, hacking cough, expectoration yellow-streaked and blood-streaked, there is almost a certainty that phthisis is being developed.

Then the examination of the sputa by aid of the microscope often clears up the diagnosis. The prognosis is always doubtful so far as recovery is concerned. In infants and old persons there is a tendency to terminate fatally. When death occurs in the aged it is caused by a superinvention of lobular pneumonia as a complication. It is estimated that one out of every five dies of this disease. Any pulmonary affection associated with chronic bronchitis renders the prognosis uncertain on account of liability of bronchial obstruction from accumulation of the secretion in the bronchial tubes. When it attacks persons beyond the meridian of life they rarely recover. As regards the duration of life, it is good. Chronic bronchitis is very apt to lead to the development of fibrous phthisis, emphysema, dilatation of the bronchi, and pulmonary collapse. In the treatment of chronic catarrhal bronchitis the first and most important point we should bear in mind is that that this disease rarely occurs in a primary form, but that it is due to some constitutional disorder. The patient must be removed from every possible source of bronchial irritation and exposure to sudden changes in temperature. Flannels should be worn next to the skin. I consider climatic influences par excellence in the treatment of this disease. It is true that in some cases medicinal agents may afford some relief and possibly a cure, but in the majority of cases the use of drugs avail us nil. In selecting a climate for those of our patients who are able financially to travel, we should send them to a locality where it is very dry, with pure air free from ozone. For my part I would prefer western Texas, New Mexico, Colorado, and southern California. There are some physicians who make grievous mistakes in sending their patients to Florida. While in southwest Texas last winter I had the pleasure of meeting some fellow-practitioners who had
previously been to the Creole State, and they all stated that while the temperature was mild, yet it was a damp and malarious country. One thing we do know, viz., that the mortality report from lung diseases in Florida far exceeds any other State in the Union. Physicians throughout the country are beginning to learn that Florida is not a suitable climate for lung diseases. No fixed rule can be laid down that will suit every case. The climate of one State that alleviates or cures one may not do likewise for another. When we come to drugs we find that the list is very numerous. Some of the most prominent are the different preparations of ammonia, opium, and tar; creosote, bromide of potash, hydrate of chloral, eucalyptus, bals. copaibae, grindelia robusta, comp. syr. white pine, turpentine, cod-liver oil, the hypophosphites of lime, soda, and potash, the various alcoholic preparations, etc. The remedies used in the acute and subacute form of this disease will sometimes afford relief. My favorite recipe for all forms of bronchitis, and which in the majority of cases has given me perfect satisfaction, is a mixture of mnr. ammonia, sulphate of codeia, fl’d. ext. of glycyrhiza, and syr. bals. tolu. If tongue be coated, bowels inactive, and urine highly colored, I give one half grain each of calomel and soda every two hours until three are taken, and then follow with a saline laxative. If after this the bowels still remain irregular, I give a pill every night, composed of extract of hyoscyamus, sulphate of iron, pulv. aloe, and comp. ext. of colocynth. Where the cough is dry and harsh, accompanied with scanty expectoration and dry râles, muritate of ammonia, antimony, comp. syr. of white pine, and some anodyne can be given in the majority of cases with great benefit. If the expectoration be abundant and muco-purulent, bals. copaibae and terebene in combination with lacto-phosphate of lime, phosphate of iron, quinine, and strychnine is good. To procure rest at night, I prefer codeia or the elixir of paraldehyde. Where chronic bronchitis is associated with pharyngitis and laryngitis much palliative influence may be obtained by the use of inhalations. There are two conditions where the use of inhalations is of great benefit: (1) Where the secretions are very abundant, purulent or muco-purulent in character. (2) Where there is a persistent, harsh, irritating cough with little or no expectoration. In the first class of cases a deep, full inhalation of some aqueous vapor with some antiseptic anodyne, such as comp. tinct. of opium, sol. carbolic acid, and spts. chloroform, or, better yet, terebene, creosote (Merk's), eucalyptus, and ether. In the second class of patients a mixture composed of ol. eucalyptus, pinus canadensis, and ol. vaseline. I have also used in these cases menthol and ol. vaseline in form of spray; this applied locally (after being warmed) to the inflamed parts has afforded much relief. I have seen cases of chronic bronchitis derive much benefit from steam inhalations of comp. tinct. benzoin and hot water. As regards stimulants in this disease opinions differ. When whisky agrees with the patient I have always prescribed it, and am well pleased with the results so far. The tonic treatment of chronic bronchitis from the beginning is one of the most important points to bear in mind. If any complications arise we should treat them at once. If there be cardiac disease, treat this, and if possible regulate the heart's action. When there is general anemia the use of the various ferugious preparations are indicated. Should we have any chronic skin affection alternating with chronic bronchitis, marked results are often had by the use of Fowler's sol. of arsenic and sulphate of zinc. When there is spasm of the bronchi a few drops of ether or chloroform afford much relief. Where the bronchial secretions accumulate in the larger tubes and can not be expectorated, emetics are sometimes given with great relief to the patient. Localized counter-irritation over the seat of the most extensive bronchial changes may sometimes be of much service. Every physician of any practical experience knows that, in defiance to all remedies and methods of treatment hitherto devised, there are many cases which will continue and be aggravated at every returning season of the year so long as the patient lives in a climate characterized by a predominance of cold and damp air, with frequent and extreme thermometric changes. Adherence to strictly temperate and judicious habits of life, with regular outdoor exercise,
is essential to the welfare of our patients in whatever climate they may reside.

In conclusion, I would say that the systematic daily practice of full, deep inhalations of pure atmospheric air, and the judicious exercise of the deep muscles of the chest will do more to remove all symptoms of bronchial disease and preserve the general health than all the medicines in the pharmacopeia.

BURGIN, KY.

Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

The Decrease of Hydrophobia; Water and Cocaine; The St. James Philanthropic Society; Dr. Edmunds' Operation; The Influenza at Oxford; High Mortality; The Medical Council Election; Cure of Multiple Exostosis; Redrainage of St. Bartholomew's Hospital, etc.

A notable decrease in the number of deaths from hydrophobia is observed by the Registrar General. The deaths from this disease had been thirty in 1889, and had averaged twenty-four annually in the three years, 1887–8–9, but there were only eight in 1890, and fewer than in any year since 1868. This decrease was coincident with a similar decline in canine rabies; the number of dogs returned to the Board of Agriculture as afflicted by this disease having fallen from three hundred and twelve in 1889, and an average of two hundred and thirty in the three years, 1887–8–9, to one hundred and twenty-nine in 1890. It seems impossible, the Registrar General says, not to associate this remarkable decline with the application of the Muzzling Order from 1st January, 1890, to those counties in which rabies was known to have been prevalent. These were the counties in which hydrophobia has been most common, namely, the groups of counties of which London and Lancashire are respectively the centers.

A medical man has discovered a very simple fact, which may possibly result in the disuse of that rather dangerous anesthetic, cocaine, as far as regards minor surgical operations. He has found the utmost limit of dilution to which cocaine may be subjected without losing its anesthetic properties; that simple water injected under the skin completely destroys all sense of feeling for the space of a few minutes in the immediate vicinity of the puncture, and during this time incisions can be made without creating the slightest sensation of pain. The skin being first thoroughly disinfected, distilled water is injected, which produces a small white swelling, like a gnat's sting, and this can be extended to the required dimensions by increasing the quantity of water injected. It is said that until further experiments can be made it is uncertain to what extent this discovery can be practically utilized, but on one occasion a small carbuncle was painlessly removed from the thigh after injecting distilled water under the skin.

Great as is the good work performed by the hospitals of the metropolis, it is unfortunately the fact that many deserving cases can not be received, and if received, can not always, owing to the enormous and constant strain on the resources of such institutions, be given the protracted attention they merit. It is for such as these that the St. James Philanthropic Society exists, for it devotes its funds to purchasing life-governorships in and letters of admission to London hospitals, chiefly in the East End. During its existence it has spent £850 in acquiring life governorships, and £210 in procuring letters of admission to the Victoria Park Hospital. It confined itself to this institution until three or four years ago, when, receiving a demand for tickets for the Truss Society and other similar charities, it altered its rules, and now exists to aid all hospitals, exercising its privileges in sending the sufferers it selects to the most suitable establishments, and keeping them there as long as is necessary.

Mr. J. Poland recently explained and illustrated Dr. Edmunds' method of opening liver abscess. The first step is to puncture the abscess by the aspirator, remove the trocar, and pass a guide through the cannula into the abscess cavity. The cannula is then removed, and a small clamp applied to secure the guide. Along the guide a small knife is passed into the liver substance, and on this latter a dilator, producing a good opening into the abscess, into
which a drainage-tube can be easily passed. Mr. Poland has in one instance used this method in a case of dead hydatid abscess at the upper part of the liver.

Almost all the heads and leading members of the colleges and halls in the University of Oxford have met, under the authority of the Vice-Chancellor, and at the residence of the Regius Professor of Medicine (Sir Henry Acland), when a report was received from the Medical Officer of Health as to the great prevalence of influenza in the city, and the impossibility of securing nursing and attendance for patients.

After considerable discussion it was unanimously resolved to recommend the colleges and halls, and the delegates of the non-collegiate students to postpone the assembling of the under-graduates until the end of the first week in February, being a fortnight later than the time originally fixed.

Influenza has now reached the dimensions of a plague. According to the weekly returns of the Registrar General, there were recorded in London during seven days in January no fewer than 271 deaths attributable to this devastating scourge. In addition to these 63 cases were reported in which influenza was noted as a secondary cause. Taking the last five weeks the rate of mortality rose above 36 in the thousand per annum, being twelve points higher than the mean rate for the ten corresponding periods in the preceding decade. During the last three weeks the rate has grown from 33 to 40, and now from 40 to 46. Five weeks ago it stood just below 22. It is by no means certain that London is more severely affected than some of the rural districts. But, with the exception of Brighton, which has now passed the total of 60 per thousand, the metropolitan area seems to be visited with heavier losses than any of the other thirty-two great towns embraced in the official report. Portsmouth, however, is put down for 44, and Liverpool for 40. Manchester, on the other hand, stands below 24. The public are demanding that the Government shall institute an official inquiry, and state in an authoritative manner what should be the national policy in face of a plague which has again visited England the third year in succession.

Dr. Frederick Leighton, father of the president of the Royal Academy, died recently. Dr. Leighton, who was for some years in practice as a physician at Scarborough, was ninety-three years of age.

By the lamented death of Sir Oscar Clayton, one of the surgeons in ordinary to the Prince of Wales, a well-known face disappears from London society. His hospitable house in Harley Street was the scene of many charming parties, and until illness laid him aside he was always a welcome guest where pleasant society was to be met. Sir Oscar was not only medical adviser to members of the Royal Family, but was regarded by them as a friend. The cause of his death was exhaustion, caused by prolonged attacks of gout coming upon a system considerably weakened by a long illness last year. During Sir Oscar's illness the Prince and Princess of Wales frequently sent to inquire after him.

A dinner has been given to Dr. F. H. Alderson and M. George Brown, who unsuccessfully contested seats on the Medical Council, on behalf of the general practitioners. The gathering was limited in numbers, owing to the severe demands made upon the time of medical men at the present moment by the influenza epidemic, but those present were unanimous in applauding the candidature of the guests of the evening, and in claiming a moral victory on their behalf. Complaint was made that the General Medical Council fails to give adequate protection to the general practitioner, and predictions were confidently indulged in that five years hence, or sooner, if vacancies occur, the General Practitioners' Alliance will place its candidate at the head of the poll.

Mr. Bruce Clarke has drawn attention to an interesting case, under his care, of multiple exostosis in a man of thirty-six. All the growths stopped growing at the age of twenty-five, but the mass in the abdomen started four and a half years ago to grow, and at the present time it filled the whole of the left side of the pelvis. The inguinal glands are enlarged, there is difficulty of defecation, and increased frequency of micturition; great pain is present along the great sciatic and obturator nerves.

Dr. E. Symes Thompson has been elected to
give the Gresham Lectures on Physic this year, and has chosen "The Nerves" as his subject.

The drainage of St. Bartholomew's Hospital, which was found so defective, is rapidly being thoroughly overhauled, special care being taken to insure the best results. Harrall's patent safety jointed pipes are being used throughout the work.

LONDON, January, 1892.

Abstracts and Selections.

Repeated Abortions and their Prevention (Annales Gynécologie, May, June, July, 1891).—Repeated abortions in the same woman are usually traceable to some one cause; more rarely there is a different cause for each one. The etiology may be considered under three heads: I. Causes traceable to the mother. II. Causes traceable to the father. III. Causes traceable to the ovum.

I. Causes Traceable to the Mother.—These may be general or local. Among the first we have Habit. Opinions differ widely upon this point, some authorities believing that every abortion predisposes to another; some claiming that this is impossible, since the uterus undergoes complete change after delivery, and the new fibers found can not have acquired a habit. Usually some other cause will be revealed by minute research.

Temperament. Little stress is laid upon this cause at the present day, except as it predisposes to diseases which may influence pregnancy. For instance, a plethoric constitution predisposes a patient to congestive troubles and to uterine hemorrhage. A lymphatic temperament is often accompanied by leucorrhea, laxness of the cervix, and atony of the genital organs. A nervous temperament predisposes to uterine contractions upon slight stimulus, and by the action exerted upon vaso-dilator nerves congestion is easily produced.

A delicate constitution may predispose to abortion, as a high activity of the whole organism is needed for the proper nourishment of the fetus.

Age. At the two extremes of the child-bearing age abortions are the most frequent. An incompletely developed uterus is unable to keep pace with the growth of the ovum, while a certain muscular rigidity in later life interferes with its development. Rouvier found that seventy-nine women in Syria, who were married before their sixteenth year, had seventy-six abortions out of three hundred and sixteen pregnancies, which gives a percentage of twenty-four.

Heredity. Opinions differ as to the possibility of transmitting a habit of abortion.

Consanguineous marriages. Their influence upon abortions has been exaggerated, and, according to Jourdes, is usually due to some family taint.

Obesity has an influence, due, according to Fournel, to the slight vitality of the fetus, the maternal organism absorbing the nourishment at its expense; to imperfect development of the uterus because of its imperfect nutrition, and to the pressure of an epiploon loaded with fat; to the circulatory and respiratory troubles of the mother, causing stagnation of the blood in the uterine sinuses, and surplus of carbonic acid—conditions favoring hemorrhage, fetal asphyxia, and uterine contractions.

Altitude. This has not been satisfactorily proved to be a cause of abortion, although Paganel believes that the diminution of atmospheric pressure favors congestion of every organ, and especially the uterus, and Devilliers holds that rapid exercise taken up and down hill might have a traumatic influence.

Climate has but slight effect upon gestation, although European women transplanted to warm climates easily miscarry, doubtless from profound anemia caused by the change.

Insufficient alimentation. It will readily be understood how this condition affects pregnancy.

Prolonged inaction. In lymphatic and anemic subjects this may aggravate the general ill health, and thus cause the accident for which it is often prescribed as a preventive.

Accidental Causes: Trauma. These may cause the death of the fetus, congestion, and uteroplacental hemorrhage, or uterine contraction. Strain produced by arduous occupations comes under this head.

Mental emotion varies in its effect upon pregnancy. At times and in some cases great mental shock or strain has no effect upon gestation, and again abortion is produced. It is probable that in the latter case a predisposition to miscarriage already exists. The action which produces death of the fetus is not to be explained, but that uterine contractions should be caused by mental emotion it is easy to understand, the contractions being to a certain extent under the influence of the nervous system. As to uterine hemorrhages, Tarnier and Budin explain them by the influence of the nervous system on the circulatory apparatus.

Poisoning by lead, mercury, carbon disulphide, tobacco, and alcohol have all been considered to produce abortion. The effect of mercury is still a disputed point, nor has that of tobacco been satisfactorily proved.
Syphilis. Maternal syphilis is undoubtedly the most frequent cause of repeated abortion. The effect upon pregnancy bears little relation to the severity of the disease, some of the lightest cases frequently causing the accident; but the same can not be said of the stage of the disease, which has a decided influence.

"Time," says Fournier, "attenuates the action of syphilis, and may end by annihilating it." This explains why in many women abortions occur each time at a later period in pregnancy, and eventually term is reached and a living child born. The first three years after the contraction of syphilis are the ones to be feared, most especially the first. According to Kassowitz, the effect of the contagion lasts from five to eight years, sometimes twelve. Fournier has seen the hereditary influence produced sixteen years after the first infection, and Henoch twenty years after. Specific treatment diminishes and even cures the tendency to abortion.

The direct cause of abortion is usually death of the fetus. Grave lesions of the fetal organs, as the lung or liver, peritoneum, etc., may be produced, or the nutritive disorders causing an alteration of the mother's blood may cause the death of the child. The placenta may become diseased, and the vessels of the umbilical cord may be diminished in caliber.

Sometimes hydramnios, rather than death of the fetus, may bring on the abortion.

Serofoida has been adduced as a predisposing cause.

Intermittent fever causes premature labor rather than abortion.

Dysarrangements of the nervous system. Chorea sometimes, but rarely, affects pregnancy.

Skin diseases. Priuritus, whether vulvar or general, is one of the rarest causes of abortion, yet it occasionally produces it as a result of the nervous excitement induced.

Disease of the urinary apparatus: Albuminuria. When this exists abortions are of frequent occurrence. Braun considers the percentage as high as eighty. Krzymsky, Barker, and Tarnier report a number of cases. The death of the fetus is usually the initial phenomenon of the abortion, due, according to Bartels, to general anemia of the mother, which interferes with the nourishment of the child. Barnes considers it due to uremic poisoning, and Rouhaut has shown that lesions of the placenta may be the cause.

When the child is living at the beginning of the abortion, hemorrhage is usually the first symptom. Sometimes albuminuria seems to have a direct action on the uterine contractions.

Gravel, by causing violent and repeated vomiting, may produce abortion.

Diabetes may occasion it.

Digestive disorders. Constipation is admitted by the best authorities to be the occasional cause of abortion, while Guillelnot claims that it is the most usual one. Not only is this due to frequent straining efforts at stool, but to the production, by the accumulation of fecal matter, of venous stasis and congestion, which favor uterine contraction. Distended intestines, moreover, exert direct pressure upon the uterus.

Diarrhea and intestinal worms have been included in the etiology of the trouble under consideration.

Circulatory disorders. Patients suffering from heart disease frequently miscarry. Ford found the percentage to be forty-one per cent. The cardiac lesion may or may not give symptoms. An excess of carbonic acid in the blood may produce asphyxia of the fetus, uterine contractions; or effusions of blood in the tissues of the placenta may result in its detachment. In cases where the cardiac symptoms are but slightly marked, defective nutrition of the mother probably interferes with the development of the fetus. Mitral insufficiency, more than any other lesion, has been found to predispose to abortion.

Varicose veins of the extremities in themselves cannot produce abortion, but some authorities claim that the compression used as a means of relief may cause uterine hemorrhage.

Hemorrhoids exceptionally have a bad effect upon pregnancy by causing uterine irritation, or because they lead to a congested condition of the internal genital organs.

Chloranemix exercises a deleterious effect on the whole organism, and consequently on the uterus.

Hemophilia would theoretically predispose to abortion.

Respiratory apparatus. Pulmonary tuberculosis is an occasional cause, but rarely of repeated abortions, since the disease is usually accelerated by pregnancy.

Local cause. Too frequent intercourse, without any doubt, is a cause of abortion.

Menstrual molimen. A more or less intense congestion of the uterus certainly exists, during pregnancy, at the period corresponding to the menstrual epoch. It usually has no bad effect, still repeated abortions have been known to occur at this time, and that with too great frequency to be attributed to chance. The rôle played by the molimen is only secondary, however, and must be associated with a predisposition to abortion or with functional troubles dependent on menstruation, as dysmenorrhea, uterine displacements, congestions, etc.

Uterine rigidity and uterine atony, if existing in a pathological degree, may produce abor-
tion. Abnormal uterine irritability, without any apparent lesion or nervous trouble, has been known to bring about the same result.

Malformations of the uterus. Uterus unicornis, while sometimes permitting of a delivery at term, may also produce abortion. In cases of double uteri pregnancy usually goes on to term, but there are exceptions to the rule. Subinvolution is a cause, as is

Chronic endometritis, whether mucous or purulent, often interfered with, and, moreover, endometritis gravidarum is often induced, and frequent hemorrhages may cause the death of the fetus or provoke uterine contractions. More rarely these contractions occur primarily.

Hydramnion may also be a consequence of endometritis, and if the fluid be suddenly expelled in large quantity, the consequent diminution in size of the uterus might result in detachment of the ovum or in uterine contraction.

Fibromata, by acting as foreign bodies, by causing displacements of the uterus, by interfering with its normal development, and by frequent hemorrhage, may cause abortion.

Cancer, however, is rarely a cause of repeated abortion, the course of the disease being more rapid than in the case of fibromata.

Laxity of the cervix, ulcerations, lacerations, may cause abortion. In the last case, as a consequence of ectropium, the mucous membrane of the cervix readily inflames, and the lesion even extends into the body of the uterus. Olschauseu holds that when the lips of the cervix are widely open abortion is due to premature exposure of lower portion of the ovum, which may cause uterine contractions or lead to injury of the membranes.

Howitz and Muller believe that the laceration has only an indirect influence. Thomas lays great stress upon irritation of the nerves of the cervical mucous membrane.

Displacements. Retrodeviations. Martin, out of forty-one cases of retroflexion, had fifteen abortions; May, out of one hundred and fifty, thirty-three abortions; Howitz, thirty-seven out of fifty-two; Charles, forty-seven out of one hundred and thirty-eight. Olschauseu admits that retroflexion is an habitual cause, and Phillips is of the same opinion. The retroflexed uterus, becoming incarcerated in the pelvis, is often subjected to direct pressure, the circulation is impeded, and congestions and hemorrhages of the membranes and placenta follow. Distension of the bladder and rectum, the result of the incarceration, cause explosive efforts.

Anterior displacements. The weight of authority seems to be against the opinion that abortions are produced from this cause. Schuhl, however, thinks that if the trouble be very marked it would lead to that result.

Lateral deviations have but slight influence upon gestation.

Prolapse occasionally interrupts pregnancy. Peritoneal adhesions fixing the uterus to neighboring organs usually soften, stretch, or break down during pregnancy. Outside of the uterine zone they may offer a firm resistance to the extension of the gravid uterus.

Periuterine tumors, ovarian or formed by a lithopedion, may press directly on the uterus. The former may be subject to inflammation, to rupture, to torsion of the pedicle.

II. Causes Referable to the Father. — These have less influence than those proceeding from the mother, who not only furnishes but nourishes the ovum, yet they often play an important part. Among them may be mentioned excessive intercourse, causing deterioration of the semen, alcoholism, lead poisoning, and Syphilis. Some authors have disputed the influence in producing abortion of syphilis in the father, but at the present day it is a well-established fact.

Serojula and pulmonary tuberculosis have an effect. D'Outrepont tells of a patient whose husband was tubercular, and who had five pregnancies, all the children dying at the eighth month. Subsequently married to a man in good health, she had four successful deliveries at term.

III. Causes Depending upon the Ovum.—Thickness of the membranes may cause rupture from slight causes.

Alterations of the decidua may result from endometritis.

Diseases of the placenta. This being the organ of fetal respiration as well as of nourishment, its impairment may cause death of the fetus. The diseases to which it is subject are hydrops of the chorial villi, fibro-lipomatous degeneration, hemorrhages caused by albuminuria or heart disease, hypertrophy, edema, calcareous degeneration, and syphilitic lesions.

Stenosis of the umbilical vessels has been known to produce abortion.

Death of the fetus may occur from previously mentioned causes. It then becomes a foreign body, and is expelled within from fifteen to sixteen days. Boyers believes that it has three principal origins — syphilis, endometritis, and uterine displacements. Schuhl is of the opinion that it is caused by syphilis, mercurial and lead poisoning, albuminuria, anemia, pulmonary tuberculosis, a cancerous diathesis, and lesions of the fetal appendages, and that syphilis is the chief etiological factor.

Abortion from unknown causes. As science
advances these are becoming more rare, yet some cases defy diagnosis.

Relative frequency of causes of repeated abortion. Olshausen claims that syphilis and retroflexion are the chief factors; Naegle and Greuer, uterine anomalies, such as flexions and catarrh; Phillips, retroflexion; Hütter, anteflexion; Egbert Grandin, Groskewitch, and most authors, syphilis. Schuh places syphilis first, and uterine affections, especially displacements, fibromata, and lacerations of the cervix next.

The diagnosis of the cause is difficult. A careful examination of parents and fetus should be made, and both parents questioned as to age, profession, morbid history, general condition, and condition of various functions. Uterine flexions frequently disappear during abortion, and reappear a few days later. Syphilis may be unrecognized, but the result of specific treatment may clear the diagnosis.

The period during pregnancy at which abortion occurs varies. In albuminuria it is rarely before the fifth month; in heart disease after the fifth month; in syphilis it may occur at any time, but usually during the second half of gestation. In endometritis it occurs during the first four months, in retro- and anteflexions before the end of the fifth. Repeated abortions due to syphilis are apt to occur each time nearer term.

Methods of Prevention.—Treatment may be begun in the intervals of pregnancy or after the beginning of gestation.

I. The cause is to be sought for and treated. Some diseases, such as nephritis, pulmonary tuberculosis, and cardiac affections, are not amenable to treatment and are aggravated by pregnancy. The patient should be advised to avoid pregnancy.

Syphilis is to be treated from its inception. Before marriage administer mercury and potassium iodide, and forbid marriage till danger of infecting the fetus is passed. Fournier thus classifies the conditions of permissible marriage in a syphilitic patient: (1) Absence of actual specific lesion. (2) Advanced stage of disease (three to four years the minimum). (3) A certain period of absolute immunity consecutive to the last specific manifestations (eighteen months or two years). (4) Non-meningeal character of the disease. (5) Specific treatment during three to four years at least.

After marriage, if either parent be syphilitic, contagion must be avoided, as the chances for the fetus are worse if both parents are infected. Warn the parents of the danger, treat infected lesions by cauterization and energetic general treatment, continued for two months at a time, with intermissions of a few weeks. Pregnancy is to be forbidden until the conditions in regard to danger to the fetus are fulfilled.

Of uterine malformations only the double uterus is amenable to treatment. Schröder performed section of the septum with a happy result upon gestation. Chronic endometritis is to be carefully treated, curettage being recommended by many authorities. Trachelorrhaphy may be resorted to for the cure of lacerated cervix.

The introduction of pessaries and shortening of the round ligaments may remedy displacements. Bands of adhesions may be treated by internal massage, rupture, or laparotomy. Treatment of lesions of the placenta and cord should be addressed to the cause, whether syphilis, endometritis, etc. When the cause is unknown, counsel observance of the rules of hygiene and combat any morbid condition. Bear in mind, syphilis is not always acknowledged.

II. During pregnancy the mother only can be treated.

Hygienic precautions are to be observed, the appetite stimulated, and tonics administered. Constipation and diarrhea to be treated, but drastic purgatives avoided.

Mental emotions, traumatism, fatiguing efforts, journeys, occupations necessitating strain or prolonged exertions are to be avoided. If abortions are apt to occur at any definite period, the patient should keep her bed several days before that time. General baths, sea baths, and douches are to be avoided, tight clothing removed, and sexual intercourse forbidden during pregnancy. If the patient be of a plethora disposition, the danger of abortion is increased at the period corresponding to menstruation, and she should then keep her bed. Bleeding may be indicated.

In persons of a nervous diathesis give anti-spasmatics, especially potassium bromide, for eight days before and eight days after the time corresponding to menstruation. (Beaufort.)

In cases of a lymphatic temperament, constitutional weakness, obesity, diabetes, intestinal worms, heart disease, chloranemia, and pulmonary tuberculosis give the treatment appropriate to the case.

Occupations exposing the patient to the various forms of poisoning are to be avoided. Syphilis may be treated with potassium iodide and mercury, intermittent fever with quinine in moderate doses, and its effects carefully watched, albuminuria by a milk diet (which is, however, better for the mother than for the fetus), puritus by lotions of hot water with carbolic acid, bichloride, or lead. In hemophilia give a plain, nourishing, but non-stimulating diet. If anemia is profound, induce abortion rather than prevent it.
During the menstrual molimen keep the patient in bed; bleed slightly; administer vibernum prunifolium in doses of from one half to one dram of the fluid extract four times a day—two days before, during the molimen, and two days after. Endometritis is to be treated by rest, which may have to extend through the greater part of the pregnancy, and slight bleeding. In cases of fibroid tumor, rest and hygienic measures alone are indicated. Pediculated tumors of the cervix may be removed. Slight ulcerations of the cervix require no treatment. For those of a more severe type hot douches may be given. Retroversions are to be treated by quiet; the patient should be told to urinate frequently. Constipation is to be treated. Pe-saries should be cautiously used, if at all. Schultze has seen good effects follow their introduction. In the case of prolapus rest is to be enjoined till after the fifth month; then, if the displacement has not been spontaneously reduced, tampons may be introduced or a soft pessary. Hütter claims that hard pessaries are well tolerated. When an ovarian tumor exists puncture may be tried in the case of cysts, ovariotomy if necessary. Alterations of the placenta are difficult to treat. Alkaline salts, as the nitrate of potassa, bicarbonate of soda, and chlorate of potassa, are recommended. Simpson believes that when the fetus dies from diseased placenta it is because of some interference with the respiratory function. Alkaline salts increase the amount of oxygen in the maternal blood. Simpson, Grimsdale, and others have used potassium chlorate with success, in doses of from one to thirty grains. Unknown causes of abortion are to be treated by hygienic measures and by prolonged rest in bed.

Among the very numerous etiological factors of repeated abortion Schuhl considers two of especial importance, namely, uterine affections, especially retroflexions, and syphilis. The existence of paternal syphilis is so often ignored that physicians should bear it in mind when frequent abortions occur and the cause is unknown.—Schuhl, American Journal of Obstetrics.

Obstetrics and Gynecology.—In this country during the past year the workers in this double department of the profession have shown considerable activity, as manifested by numerous papers read before the societies, giving the results of their experience, and by the many important questions submitted from time to time for discussion. In the Obstetrical Society of London, early in the year, Dr. Playfair read a paper on the Removal of the Uterine Appendages in cases of Functional Neuroses. In the discussion on this subject Sir Spencer Wells spoke very strongly on the unnecessary and unjustifiable mutilation which has often taken place for such transitory diseases. Dr. Watt Black, in his introductory address as president, dealt with the subject of Puerperal Fever. Dr. Herbert Spencer contributed an interesting account on Visceral Hemorrhages in Still-born Children, relating the result of one hundred and fifty post-mortem examinations. Dr. Herman submitted a further report on his continued investigation on the question of puerperal eclampsia, especially in relation to the temperature and the state of the urine. Dr. John Phillips read a paper on the Influence of Purpura Hemorrhagica upon Menstruation and Pregnancy. Mr. F. J. McCann, in a communication on Chorea Gravidarum, gave the details of six cases. In the Medical Society of London, Dr. William Duncan gave an address on Chronic Disease of the Uterine Appendages, with thirty consecutive cases treated by abdominal section. This address caused considerable discussion not only in the society, but in the columns of The Lancet, owing to a joint letter of Drs. John Williams and Champneys, in which they stated that "this wholesale resort to a mutilating operation calls for serious consideration by the profession." At the British Gynecological Society many interesting papers were read. Mr. Lawson Tait communicated the details of a case of double pyosalpinx, which led to a considerable amount of difference of opinion. A discussion took place on "ovulation," during which many extraordinary statements were made. Dr. Grigg intimated that he had found that more than twenty-five per cent of female infants menstruated during the first ten days after birth. Ectopic Gestation and the variety Tubal Pregnancy, Secondary Hemorrhage, and Diseases of the Uterine Appendages were some of the subjects discussed at the ordinary meetings of the society, the last subject occupying three evenings. A departure from the ordinary arrangement of the society took place in June, when a provincial meeting was held at Newcastle under the presidency of Dr. Robert Barnes, and discussions took place on the following subjects: Surgery of the Uterine Adnexa, Puerperal Septicemia, Vaginal Hysterectomy, and the Diagnosis of some Tumors. Among the papers was one on Hypnotism in Hysteria by Dr. Draper. Early in the session of the Edinburgh Obstetrical Society its president, Dr. Berry Hart, read a very important paper on the Anatomy and Mechanism of Early Abortion, which might be regarded as the first endeavor to study abortion by the method of sectional anatomy. In another paper by the same author, on Displacement of the Placenta
in Extra-uterine Gestation and its Relation to those cases ending in Pelvic Abscess, he explains such cases as beginning in the fallopian tube and developing into the broad ligament. Dr. Charles E. Underhill related three cases of rupture of the uterus, and exhibited one which was successfully treated by laparotomy. Dr. Halliday Croom offered a criticism of some of the Lesser Gynecological Manipulations. A communication from Dr. Engelmann, of Krefz nach, on the Treatment Fibroid Tumors of the Uterus, was made, in which four hundred and nine cases were carefully tabulated in regard to treatment by baths, by ergotin, or by electrolysis. The younger Scotch Society—the Glasgow Obstetrical and Gynecological—has shown some good work during the year; and we have especially to congratulate one of its Fellows, Dr. Murloch Cameron, on his success in cesarean section. The new North of England Obstetrical and Gynecological Society, under its distinguished president, Dr. James Braithwaite, discussed during the year subjects similar to those brought forward at the London societies. We have to note the death of two prominent members of the profession whose devotion to this department warrants us in recording here the loss sustained by their removal. The first was Dr. Fordyce Baker, of New York, whose work on Puerperal Diseases is well known; his abilities received recognition by his brethren on this side of the Atlantic, and we believe that he greatly valued the honorary degree conferred on him by the University of Edinburgh. The other, Dr. James Henry Bennet, was brought prominently before a former generation by his work on Uterine and Ovarian Inflammation, but more recently he was known by his writings on the treatment of pulmonary phthisis.—London Lancet.

Ophthalmoscopic Appearances in Hypermetropia and Their Significance.—Dr. H. C. Bristowe, in a paper read before the British Medical Association, Section on Ophthalmology, said that although certain unusual conditions had long been recognized in hypermetropic eyes, their significance and causation had been but little worked out. There was first the "hypermetropic disc," a condition in which the optic disc was hazy, with or without slight swelling, and often tortuosity of the vessels, and it might not infrequently be mistaken for optic neuritis. The second was a condition in which the retina was visible as a bright reflecting surface, and had been called the "watered silk" retina. The third was a variety of the above, in which that condition was more marked round the yellow spot, giving an appearance not unlike the petals of a sunflower. A fourth was an undescribed condition, in which, on the yellow spot side of the disc, the retina presented strie which ran concentrically with the outline of the disc, and might extend as far as the yellow spot, the lines becoming segments of larger circles, till finally near the macule they appeared almost straight. In one very intense case it could be very clearly demonstrated that the retinal vessels were not implicated in the striation, but apparently lay beneath it. With reference to these conditions, he had, through the kindness of Messrs. Nettleship and Lawford, collected 125 cases of hypermetropia. From these cases he had worked out the following facts: None of those conditions in any way interfered with the acuteness of vision, for in all of them, when corrected, it was up to the normal standard. There were no definite relations between the intensity of these conditions and the degree of hypermetropia present. The hypermetropic disc might be found at all periods of life, and probably, once present, continued to the end. The other conditions, however, he had only found in children; they seemed to disappear on the attainment of puberty. The hypermetropic disc he found in 29 cases out of the 125; the simple watered silk retina in 16 cases; the sunflower appearance in 3, and the concentric striation in 9. What was the pathology of these conditions? The hypermetropic eye was recognized as imperfectly developed. Landolt held that pseudo-neuritis was due to imperfections of the nervous apparatus, and the tortuosity of the vessels he explained by their being comparatively larger than the sclerotic, in which they were developed. But as the vision of these patients was good, and the retina was normal in size, there was no proof of any nervous imperfection. Loring explained it by an increase of connective tissue in the neighborhood of the disc. He also explained the watered silk retina in a similar manner. His explanation of the hypermetropic disc seemed reasonable; but if it held good for the watered silk retina also, why in one case should it remain throughout life, while in the other it disappeared at puberty? To obtain a watered silk appearance, it was necessary to have a number of exceedingly fine strie. This actually existed in the tapetum lucidum of animals, but that the two were not related was proved by the watered silk condition, being superficial to the retinal vessels. The ganglion cells while living had, according to Shultz, a well-marked parallel striation. He (Dr. Bristowe) would suggest that this might easily account for the "watered silk" condition. And, further, as differentiations of nerve cells became less marked on increasing age, the absence of this appearance in adults was ac-
Electro-Diagnosis in Brain and Nerve Injuries.—Dr. W. H. Walling says: When a lesion is in the cord, above the dorso-enlargement, as in some forms of transverse myelitis, all the nerve and muscle reactions will be normal for the parts below the trophic center, except that possibly there may be some increase in readiness of response to electro-stimulation. If the lesion involves the dorso-enlargement, of course there would be the reactions of degeneration.

If the lesion be in the basal ganglia, or in the hemispheres above, there will be no change in the normal formula, unless the disease in its progress produces changes in the cord, thus affecting peripheral nerves.

In a hemiplegia, the result of a clot in the corpus striatum, there will be no change in the reactions, except that in some cases the muscles respond more readily than the normal muscles, to both currents. In other cases the reactions are simply normal, but in still other cases there may be a quantitative decline, due merely to the degenerative changes in nerve and muscle.

In uncomplicated lateral sclerosis the reactions are all normal. I have a case of lateral sclerosis under my care, of eight years' standing, and specific in origin, which when first tested, some six months ago, showed partial reaction of degeneration, but now the normal formula has been re-established.

In amyotrophic lateral sclerosis there will be both qualitative and quantitative changes in the muscles, or partial reaction of degeneration.

In anterior polio-myelitis, infantile paralysis, and in lead palsy, we have the reaction of degeneration.

It will also be found in peripheral paralysis of traumatic, rheumatic, neuritic, or diphtheritic origin. It is absent in all cerebral, hysterical, myelitic, and purely myopathic paralyses.

In cases where the reaction of degeneration is limited to a definite peripheral neuro-muscular area, the probabilities are in favor of the diagnosis of a peripheral lesion. When the phenomena of R. D. are observed over a larger area, a central (spinal) origin of the paralysis is rendered probable.

In light forms of rheumatic, traumatic, or pressure paralysis, the reactions will all be normal. In the middle form of these affections, qualitative and quantitative changes appear, and there is partial reaction of degeneration. When the severe form appears, we then have complete reaction of degeneration, or the normal formula completely reversed.

In muscular wasting, or simple atrophy, such as in phthisis, etc., in diseases of the joints, and in idiopathic myostitis, the reactions are normal, or the diminution is to the maximum of excitation.

By the quantitative changes are meant an increase, a diminution, or a total disappearance of electrical irritability to one or both currents.

By qualitative changes are meant a modification, in kind, of the normal reactions of nerve and muscle to electric currents. This is the so-called 'reaction of degeneration.'

There is a third, or a mixed change, or a combination of quantitative and qualitative variations of irritability.

The histological changes shown in the preceding table explain the phenomena of the reaction of degeneration. There is a solution of continuity, and a consequent inability to transmit impressions. Gessler, in his researches upon cold-blooded animals, seemed to prove that true R. D. was entirely due to muscular degeneration, as, while in these animals complete nerve degeneration occurred, muscular degeneration, as well as R. D., was absent.—Journal American Medical Association.

Surgery.—The last twenty years have witnessed the greatest revolution in the practice of surgery of which there is any record. Not only has the mortality of surgical operations been reduced to a point never dreamed of by the last generation of surgeons, but the area of surgical interference has been enormously extended. In the earlier years of this period the developments of the surgical art were so rapid and marked that in each annual survey several had to be recorded. But now this wave of progress has largely spent itself, or reached its full height. The battle of antisepctic surgery has been fought and won, and there are now very few, if any, regions of the body not the field of successful surgical procedures. We should be sorry to imply that we have attained to anything like finality in surgery; what we have done is to reach to a point of great perfection in the technique of aseptic surgical operations, and of very general application of surgical procedure for gross pathological lesion in any part of the body. What we are witnessing now is a lateral extension of good surgery—its practice by an ever-increasing proportion of the profession. The dirty scalpel is
practically extinct, and the wet and septic poultice is almost as rare as the dodo. The most careful anti- septic measures are now taken by surgeons all over the country who have been at pains to become fully acquainted with the details and results of Lister's work. The treatment has been considerably simplified, and this was a necessary preliminary to its general adoption. This is a most noteworthy feature of the surgical progress during the past year, and we may confidently expect to see greater advance in this way in the future. In the matter of the area of surgical interference two points may be mentioned, both included in the surgery of the abdomen. They are the advance of hepatic surgery and the recession of the surgery of the vermiform appendix. The writings of Mr. Mayo Robson and Mr. Knowlesy Thornton, although recording experiences gained in previous years, have given a great impetus to the surgery of the gall-bladder and ducts. Cholecystotomy, thanks mainly to the work of Mr. Lawson Tait, has for some few years been a well-recognized procedure, and in cases of distended gall-bladder from impaction of a calculus in the cystic duct the success has been very great. But from this surgeons have advanced to the treatment of more difficult cases, to the removal of gall-stones from small or even contracted gall-bladders, and from the common bile-duct. These cases are attended with special difficulties. Not the least of these is that of diagnosis; and when this has been overcome, the surgeon's task is only begun. The parts are often found to be so imbedded in or matted together by adhesions that great care is necessary to avoid injury of the important structures in the neighborhood of the common duct. The depth at which the stone may lie in the duct, and the unyielding nature of the liver constitute special difficulties when an attempt is made to close a wound in the duct by sutures. In many of these cases the surgeon is in doubt whether to close the wound in the duct or drain it, or to remove the gall-bladder and cystic duct; and further experience is required to enable operators to formulate rules on this matter. The immediate closure of the wound by suture is the ideal procedure, and when it can be safely carried out should be employed. There will probably always be some cases where the attempt to do this will be attended with great risk of failure, and here drainage offers the best chance of success. Excision of the gall-bladder seems to be indicated where the manipulations necessary for the removal of gall-stones have inflicted irreparable injury upon it. Papers read at the Clinical Society by Mr. Andrew Clark and Mr. Bland Sutton on Cases of Excision of the Vermiform Appendix for Perityphlitis gave rise to an important discussion in which opinions were expressed in strong opposition to the indiscriminate removal of the appendix, which appears to have been carried out by some surgeons. There are cases in which the appendix ought to be excised, as for instance when it is gangrenous. There are many more where careful opening, cleansing, and draining of an abscess around a diseased or perforated appendix is the proper course to pursue, but there is no occasion to operate at all in the majority of cases of typhilitis; and certainly recovery from such an attack is not the justification of removal of the appendix, lest another and worse attack follow. At the early part of this year all eyes were turned to Berlin, the seat of the earliest and most extensive experiments with Koch's tuberculin. For some time great hopes were entertained of it in surgical tuberculosis. Further experience, however, has not justified these bright anticipations. For lupus, the remedy as now prepared is extremely useful, although other means often have to be adopted for completing the treatment. But in diseases of bones and joints the remedy has not proved the success it was announced to be, and there seems reason to fear that, except with regard to lupus, tuberculin will play but an insignificant part in surgical therapeutics.—London Lancet.

MOBILES IN THE SOIL.—Almost daily fresh evidence is accumulating as to our dependence upon microbial action for the supply of vegetable food and for the conversion of refuse matter into nutriment for the various plants which supply us with vegetable food. Only a fortnight ago we gave insertion to a paper by Dr. F. B. Wells and Dr. Poore which showed in a conclusive way the extraordinary power which common earth has of retaining the organic and inorganic constituents of urine and converting them by a process of nitrification into food available for plants. Further papers bearing upon the same subject will be found in the current number of the Journal of the Royal Agricultural Society, a journal which, in the hands of its present editor, Mr. Ernest Clarke, has made rapid strides, and bids fair to be of the greatest value in disseminating a scientific spirit among our agriculturists. The paper by Dr. Munro on the nitrifying ferments of the soil is a most excellent summary of the subject, which should be read by all who are interested in the matters discussed. It shows, what is being shown almost daily, how strictly scientific have been some of the processes which have been familiar for ages, although the explanation of the process may not have been apparent. "To the natural process of nitrification as it occurs in the niter-producing villages of India, Europe
has been and still is largely indebted for a supply of nitrate of potash wherewith to make gunpowder. The heaps of niter earth found near the sites of former habitations consist of house refuse mixed with porous soil, ashes from the fires, urine, etc. After long-continued exposure to Indian warmth, lixiviation of this niter earth with water furnishes a solution from which saltpeter is extracted by evaporation and crystallization. In 1877, when France could not import saltpetre, the Government caused to be printed "Instructions for the Establishment of Niter Heaps," which Boussingault makes the subject of one of his essays. Heaps of soil mixed with ashes and animal refuse arranged in layers separated by loose straw, kept under cover, freely exposed to air, and watered as often as possible with urine, turned and removed once or twice, if practicable, furnished in the course of some months a notable supply of niter. If treated after the manner prescribed we learn that about four hundred and fifty tons of material would in two years furnish about four tons and a half of crude saltpeter."

The other paper to which we have alluded is also one of great importance, and shows again how agricultural practice has been right, although the explanation was not forthcoming. The custom to which we allude is that of sowing leguminous plants for the purpose of enriching the soil, and following the leguminous crop with one of the cereals. This custom, practiced by the Romans two thousand years ago is one which recent advances in bacteriology show to be correct. The paper on the Sources of Nitrogen of our Leguminous Crops, by Sir John Lawes and Dr. Gilbert, not only gives an excellent summary of what has been done by previous workers, but also affords details of their own most important experiments. It has long been known that the addition of nitrogenous manures had very little effect upon the growth of the leguminose, and it has now, we think, been conclusively shown that many at least of the papilionaceous leguminose (peas, beans, lupins, etc.) derive their nitrogen from the air circulating in the earth around their roots, and that the appropriation of this nitrogen is due to nodules growing upon the roots, which nodules are in a sense parasitic and are largely composed of bacilli. The experiment of growing leguminose in sterilized soil, and of showing that no vigorous growth takes place until such soil has been "seeded" with the washings of a leguminous soil containing the necessary microbes, has been repeated by Sir John Lawes and Dr. Gilbert with complete success. This dependence of plant growth upon the existence of parasitic bacillary nodules upon the roots is a fact of great interest, and indications are not wanting that this may be only the first demonstration of such dependence, and that further investigations will show that microbes minister to the nutrition of other plants in more direct ways than we have yet had any idea of. This paper by Sir John Lawes and Dr. Gilbert is one of some length, and we have only been able to give the balddest possible indication of its scope and importance.—Ibid.

Synopsis of Opium Intoxication. — In the Journal of Mental and Nervous Diseases, June, 1891, there is a paper with the foregoing title. Morphinomanias include literary men, mathematicians, and scientists. Medical men are more exposed to the formation of the habit than any other class. They have a seemingly reasonable excuse, knowing the speedy effect of morphine that permits a return to work. In time the will is paralyzed and personality destroyed. Molecular changes are brought about and a neurosis is produced. Mental faculties are the ones that suffer first from the use of opium. There are marked depression of spirits, hallucinations, especially of sight, and morbid fears. Sensation is usually impaired or perverted. There is a wain complexion, greasy skin, a vacant look, listlessness, loss of appetite, and obstinate constipation. On the withdrawal of the drug there is diarrhea. If this does not occur, it is safe to suspect that the patient still continues the use of opium in some secret fashion.

There are several plans of treatment. The noted German, Dr. Livenstein, stops all morphine at once without regard to length of habit or dose. This entails much mental and physical suffering and the risk of suicide. Collapse is threatened. Against this plan Dr. J. B. Mattison, of Brooklyn, expresses himself with much emphasis, and holds that no man is warranted in subjecting his patient to such horrid torture. The dread of such an ordeal as described by others keeps many in the continued toils of the morphine habit. The rapid but not abrupt withdrawal of opium is what Dr. Mattison advocates. A certain amount of control of reflex irritation may be obtained by bromide of sodium in large doses for four or six days. The maximum sedative effect of the bromide should be secured by the time the maximum nervous disturbance is expected or brought about by withdrawal of the opium. But even this plan causes much suffering. The gradual method seems more rational. The only reasonable hope for cure at all is in the wise care of a specialist familiar with all the exigencies that may arise. A collapsed condition is best met by stimulants, ammonia or
alcohol. Delirium can be warded off by coca, chloral, and bromides. For vomiting, stop all solid food, give hot beef extract, hot milk, and beef peptonoids in liquid form; and as remedies, ammonii aram., spir., bismuth subnit. To overcome diarrhea, first use an emulsion of castor oil and brandy, then give bismuth subnitrate and zinc sulphocarbonate. Treat pains in the legs by hot foot-baths, massage, and friction. In the event of apparent sleeplessness, be sure, first, that the patient is not shamming, then administer full doses of bromide, sulphonal, and sometimes valerianate of zine in the form of elixir. Codeine can be given to allay pain as safely as any opiate, and without great danger of its use growing into a habit. In anemic conditions iron and strychnine are indicated. In notable depression or long-lasting prostration, alcoholic stimulants are required. Restlessness and insomnia may be warded off by a hot bath before retiring. Electricity, especially the electric bath, will in most cases tranquilize the system. Mental quiet is a positive essential. Cheerful surroundings, amusement, and pleasant society are necessary. If the patient uses the hypodermic syringe, this should be instantly discarded and all opium given by the mouth. The physician should take complete possession of his charge, and be to him a constant, kind adviser and moral support.—New York Medical Journal.

New Researches on Variola Vaccine.—In connection with the commission now being held on the efficacy of vaccination, Chauveau's experiments are interesting. An abstract of them is given in the Boston Medical and Surgical Journal for December 3, 1891. His experiments were made with the product of the eighth transmission from heifer to heifer, and were exclusively performed on subjects of the bovine species. The results of his investigations are briefly as follows: (1) Vaccine virus never gives smallpox to man. (2) Variolic virus never gives vaccinea to the cow or horse. (3) Vaccine is not even attenuated smallpox, and can not be compared to the benign anthracoid infection which is communicated to animals by inoculation with attenuated anthracoid virus. (4) If vaccine is a derivative of smallpox, it is by reason of a radical transformation of the variolic virus, a transformation thus far unattainable by experimenters. (5) These last propositions lead to another more general one, which is this: the attenuation of virus is not a physical process which can be identified with the transformation of virus. If these views are correct it may very naturally be asked, How does vaccine confer immunity from smallpox? On consideration of the results of experimental preventive inoculation we may divide them into three methods, as follows: (a) Fabrication of prophylactic substances by pathogenic agents outside of the organism which is to be rendered immune, and the introduction into this organism of the said substances in sufficient quantity to confer immunity, these substances having been by the proper manipulations freed from the virulent elements, properly so-called, and rendered offensive. (b) Fabrication, in the organism to be protected, of prophylactic substances by the pathogenic agents, with the germs of which inoculation has been made under conditions which insure the benignity of their infectious effects. (c) Fabrication of the vaccinal substance by a virus very like the virus against which immunity is sought, but belonging to another species. In this latter category Chauveau places the microbe of chicken cholera, in its function of conferring immunity against charbon. Here also he would place the virus employed as a preservative from smallpox. Whatever, in fact, may be the origin of vaccine, though we were to admit it to be a derivative of smallpox, it none the less constitutes in reality a morbid species distinct from the latter. The two viruses, vaccinal and variolic, are reducible into one and the same infectious entity. London Lancet.

Nervous Complications of Gonorrhea. In the Gazette des Hôpitaux for September 5, 1891, Dr. Paul Raymond states at length the complications of gonorrhea. They are not unlike those induced by other forms of infectious disease. Charvot, in his article on sciatica, says that two predisposing pathological factors of this diseased are found in pelvic inflammation among women and gonorrhea in men. When due to gonorrhea, sciatic inflammation rarely appears during the first week, but is delayed until the second or third week. The onset is sudden, almost instantaneous. The early symptoms often come on in a night, and their extreme limit of severity may he reached in twenty-four hours, relative calm being established in four or five days. Then the neuralgia disappears or remains stationary for a time, worse at night, and always most intense about the exit of the sciatic nerve. The pain travels down the thigh, but rarely beyond the popliteal space. There is also a crural neuralgia of similar onset and origin. These conditions coincide with the degree of articular manifestation in gonorrhea, both being complications or extensions of an infectious process. A double sciatica suggests the involvement of the spinal cord—a meningo-encephalitis. Meningeal inflammation of the cord in no wise differs clinically.
from other infectious forms of myelitis, from the erysipelas, from that due to variola or typhoid fever. When due to gonorrhea, it usually lasts from a fortnight to six months, and quite exceptionally over two years. Death sometimes occurs. Reflex paralysis due to joint trouble gives about the same symptoms as a true myelitis, without organic lesion. There are also muscular atrophies following gonorrhea that do not appear to be consecutive to the joint lesions. Abnormalities of special sense appear as complications of gonorrhea. Amblyopia may accompany multiple arthropathies and last several days. Optic neuritis of similar origin has been noted, and also severe headache and deafness. The skin does not escape. A gonorrheal erythema sometimes appears that is a true angiomegaly. This is a morbid process quite distinct from eruptions due to local applications, such as balsam of Peru, which are frequently seen during the treatment of gonorrhea. The cutaneous complications of nervous origin are symmetrical, and have more the appearance of congestion than of true inflammation.—New York Medical Journal.

Tuberculocidin; or Prof. Klebs's Modification of Koch's Tuberculin.—With a supply of this substance, recently received by me from Prof. Klebs, he gives the following instructions as to its use and action: The beginning dose to be from two to five milligrams, and the increase to be rapid up to one, and subsequently to two, four, six, and eight centigrams.

Hectic fever is no contra-indication; in fact the temperature rapidly decreases and the local conditions improve.

The preparation causes absolutely no fever in tubercular patients, and increasing fever when present is an indication for increasing doses.

The remedy is given daily, and when large doses are reached they are divided, half being given in the morning and the other half in the evening.

The disintegration of the bacilli becomes manifest after five to ten of the larger doses have been given. Cough and expectoration diminish and disappear rapidly, and a gain in weight and strength soon follows.

From Prof. Klebs's statement it would appear that tuberculocidin can be employed in cases where heretofore Koch's tuberculin was contra-indicated. The therapeutical effects claimed are identical with those heretofore observed by myself and others from Koch's preparation, obtainable, however, with much smaller doses, of from one tenth to five milligrams.

With the necessary care Koch's tuberculin is entirely free from disagreeable symptoms, the same as Prof. Klebs's modification is claimed to be, and until the new substance can be produced so that the price, which now amounts to from $1 to $2.50 per average dose, is greatly reduced, there seems little need for its substitution, unless as an only and last resort in cases with high fever and otherwise very active progressing disease.

Even in such I doubt the wisdom of so rapidly increased and large doses, and, in view of the experience of a year ago with Koch's remedy, which was then given in what we now know to have been overdoses, I would caution against a repetition of the same blunders.

The impossible is not going to happen even from the employment of the Kleb's tuberculocidin, and without doubt we must still hold fast to the principles of nutrition and climatic influences, or eventually realize disappointment.

In the mean while a cautious trial of the modified substance would seem proper only under every possible precaution, and I trust that Prof. Klebs may have led us one step further in the treatment of tuberculosis.—Karl von Ruck, M. D., Journal American Medical Association.

Curious Nervous Disease in Members of the Same Family.—In the last number of the Neurologische Centralblatt there is an abstract of a paper by Bernhardt in Virchow's Archiv describing a curious and interesting condition which he found in several members of the same family. The parents were apparently healthy. They had in all eight children, six boys and two girls. One of the girls died at an early age, and suffered in a similar way to that about to be described as affecting two brothers. The second sister was neurotic, but otherwise free from signs of organic disease. Her children and grandchildren were healthy. Two of the six brothers died before they were thirty, and did not suffer from the affection. The only child of one who died is healthy; the two children of the other brother who died are imbeciles. A third brother also died, but after attaining a greater age, and he apparently suffered in the same way as the three surviving brothers. These developed about the thirteenth year a very slowly progressive paralysis limited to the lower limbs, and consisting in muscular rigidity with increased reflexes, but without any sensory or trophic disturbances. The functions of bowel and bladder were retained, and intelligence was not interfered with. In one of the three in whom symptoms have been present for over ten years there have been added
lately more symptoms indicating that the process has spread to the medulla and pons, and perhaps also has invaded the cerebrum itself. These symptoms are disturbance of articulation, paresis of isolated eye muscles, and nystagmus. The symptoms it will be seen, resemble in some particulars those of disseminated sclerosis, but in the mode in which it attacks several members of a family it bears a close analogy to the ataxy of Friederich.—London Lancet.

HYGIENE AND DIETETICS OF THE ARTHRITIC.
In the December number of The Physician and Surgeon, Dr. Lucas Championnière, in the course of an able article upon this subject, deduces the following rules as to the best diet to be ordered for the patient. The author says that for those suffering from pronounced arthritics, who are very lithemic, preference should be given to white meats, veal, and young animals, mutton, and lastly beef. In some cases, however, game or venison should be avoided. If fish be ordered, the white-meated is best, as we find it in the sole, haddock, or codfish, while such colored or oily flesh, as in the salmon, eel, mackerel, or sturgeon, had best be avoided. Shellfish and crustacea, while nutritious, the author considers as too compact in their tissues, and hence indegustible, and on this account inadvisable for the arthritic.

Peas and beans yield a considerable amount of nitrogenous matter, but, strange to say, do not seem to form uric acid. The fruit-acids become alkaline in the system, and these two classes the author advises in the diet table.

As to liquids, Dr. Championnière considers water especially good for the gouty. Some writers have gone so far as to say that this article alone is sufficient for a cure. Water increases the excretion of urea, and it is proven that the production of uric acid is in indirect ratio to the formation of urea, hence the more water the patient consumes the less uric acid is formed. Finally, water aids in the elimination of all waste organic products, and in the dissolution of the fatty acids which constitute gall-stones. A dry diet, it is thus seen, is rather a dangerous one for the arthritic.

As to wines, the author advises very light varieties. Alcoholic wines and champagne especially are most injurious.

The following rules are held to be applicable in every case:

See that the arthritic patient produces and absorbs the least possible amount of organic poison, which, by irritating the less resisting connective tissue, would cause arthritic manifestations.

Modify the arthritic diathesis as far as possible by means of exercise, gymnastics, hydrotherapy, massage, etc.

Attend to the amount and quality of the food; hasten nutritive changes; facilitate elimination of all organic waste and toxins by stimulation of the emineries, which are usually unreliable in arthritic patients.—Journal Amer. Med. Association.

THE PHRENIC NERVE.—In the recent number of "Brain" Dr. John Ferguson, of Toronto, has a note on the function of this nerve. He had under observation some time ago a patient suffering from progressive muscular atrophy, in whom there was an affection of the diaphragm. The phrenic nerve was examined after the patient's death, and while some fibers were found to be completely degenerated, others were undergoing degeneration, and a third set were quite healthy. He drew the inference that the phrenic nerve was not wholly motor, but in part sensory. To support his hypothesis, he examined the condition in a cat after division of the right phrenic nerve, and three weeks later, on opening the abdomen, the sensibility of the diaphragm was found much impaired. The nerve was completely degenerated. In another experiment the posterior roots of the third, fourth, fifth, and sixth cervical nerves were divided, and subsequent examination of the nerve showed that there was well-marked degeneration of about a third of its fibers. Before the animal was killed it was found to be anesthetic on the side of its diaphragm corresponding to which the posterior roots had been divided. Dr. Ferguson concludes from these facts that the phrenic is to be regarded as a mixed nerve, and that in inflammations involving the diaphragm or the serous membranes attached to it we may look for sensory disturbances, often of wide distribution. The phrenic being sensory, from irritation of that nerve, pain in the cervical region where it arises is to be looked for, and in this way he accounts for severe pain at the back of the neck and in the shoulder in a patient whom he had under his care suffering from an abscess of the liver which subsequently proved fatal.—London Lancet.

TREATMENT OF PNEUMONIA.—Dr. G. W. Balfour (Edinburgh Medical Journal) says: Whether, therefore, we hold old-fashioned or new-fashioned views as to the causation of pneumonia, the treatment of it by chloral would seem to be equally appropriate from a physician's point of view; while a patient can not but regard as both agreeable and suitable a remedy which soothes pain, stops cough, and relieves insomnia. Chloral does all this, but it does more, it really seems to shorten the dura-
tion of the disease; or, as we may put it, to favor an early crisis. Having seen pneumonia treated in almost every imaginable manner, from large bleedings to colored water, I have no hesitation in saying that, so far as I am capable of judging, the treatment of pneumonia by chloral is that which gives the patient most relief from his sufferings, which more than any other favors an early crisis, and which appears to have no tendency to increase the mortality, if it does not indeed diminish it, which would be difficult to prove.

For reasons already given, I always give in pneumonia chloral—Liebrich's chloral, none other is safe—dissolved in infusion of digitalis. The dose of chloral and of digitalis must vary with the age of the patient. For an adult I prefer to give for a first dose twenty grains of chloral in half an ounce of infusion of digitalis, the subsequent dose being ten grains of chloral in half an ounce of digitalis every four hours, continued till the temperature falls to normal, then to be replaced by some appropriate tonic. After the first dose, if it be one of twenty grains, or after the second or third dose, if we begin with ten grains, the pain and cough cease, the patient does all day and sleeps soundly during the night; the glutinous sputa either cease entirely or become changed to a scanty mucous phlegm easily expectorated, the pulse drops, the temperature falls, the disease is arrested, and the patient gradually convalesces. A jacket poultice is a useful adjuvant, which may be, however, very advantageously replaced by a sheet of cotton wool. An appropriate diet can not, of course, be dispensed with.

ON THE ETIOLOGY OF PERIPHERAL FACIAL PARALYSIS.—(Dr. S. Goldfan, Neurolog. Centralbl., Vol. xvi). The author considers four cases of facial paralysis occurring in syphilitic subjects; the symptoms referable to the facial nerve coming on a very short time after the primary lesion, that is, before or during the stage of roseola. The symptoms presented themselves in the first case in thirty-five days; in the second, in three months; in the third, in fifteen days; and in the fourth, in twenty days. In one of the cases an ordinary attributable cause was present, namely, exposure to cold; but this was very slight. In the second, the patient, an actor, had simulated toothache on the stage the evening before, pressing against the side of his face with his handkerchief. In the remaining two cases no attributable cause could be assigned. Facial paralysis occurring during the third stage of syphilis is ordinarily not a difficult matter to explain, for it may be due to gummata, basal meningitis, periostitis, exostosis, caries of the petrous portion of the bone, or changes in the trunk of the nerve itself; but the author finds it difficult to explain how it occurs in cases where all these factors can be ruled out. Lang's hypothesis, that is, that during the appearance of syphilitic exanthem there is a coincident infiltration into the basal meninges, or the central nervous system itself, which is sufficient to account for the peripheral paralysis, the author considers untenable. The only light he can throw on the problem is expressed by saying that under the influence of the syphilitic infection and in the very early stages of the disease, particularly during the period of eruption, there exists a marked disposition on the part of the facial nerves to peripheral inflammation and paralysis.—Journal of Nervous and Mental Diseases.

ACetonuria in the Insane.—Drs. Boeck and Slosse, who have been engaged in examining the urine of insane patients for acetone, remark that great care must be employed in the collection of the urine; the flasks must be absolutely full and efficiently stopped, or, better still, the distillation should be commenced immediately. Lieben's iodiform reaction was found to be the most suitable one for indicating the existence of minute quantities of acetone. Gunning's test may also be used, and if these two give negative results all others are superfluous. The perchloride of iron test is useless for acetone, but is characteristic of diacetic acid. Acetone may exist in the urine under physiological conditions; its importance depends upon the quantity of nitrogen in the food. A small quantity, therefore, in the urine of insane patients is of no importance whatever. The amount did not appear to have any relation to the mental state of the patient, that is to say, to the existence of such conditions as depression, excitement, fear, or delusions. The quantity of acetone increases considerably when the body is in a state of inanition. It is a good plan, according to Drs. Boeck and Slosse, to commence artificial feeding when a patient who will not eat passes urine containing a large proportion of acetone. London Lancet.

FACIAL NEURALGIA AND EAR TROUBLES.—A most interesting series of observations, recorded by Dr. Gellé, upon the condition of the ear in various forms of nervous disease has appeared in recent issues of the Progrès Medical. The coexistence of pain in the ear and neuralgia upon the same side of the face was found in twenty two cases of facial neuralgia. Often facial neuralgia starting from different points is symptomatic of acute inflammation of the
ear, or of new inflammatory attacks set up on some former diathetic otorrhoea. The facial pain in this case preceded by several days the otic or periodic complication. At times, in spite of frequent attacks and intense otalgia, the ear itself remains sound. In certain instances the attacks bear a close relation to a simple or diathetic inflammatory condition at the level of the orifice of the eustachian tube. In three cases examined syphilis proved to be the cause of the unilateral ear difficulty, one of the patients pre-enting severe otalgia without lesion for sometime before the appearance of a subacute otitis resulting in suppuration, secondary symptoms appearing only after the ear trouble. There is a history of facial neuralgia in nearly all cases of chronic deafness. It is also a frequent premonitory symptom of facial paralysis, and accompanies vertigo ab auris base and hyperacusia. The cases cited demonstrate a close relationship between facial neuralgia, acute otitis, and facial hemiplegia. New York Medical Journal.

Hyoscyamine in Lettuce.—Although lettuce has been used in medicine from early times as a sedative, the active constituent has never until now been with certainty determined. In a paper read before a recent meeting of the Chemical Society, Mr. T. S. Dymond explained that the mydriatic action of an extract of lettuce used in medicine to which his attention had been drawn was due to an alkaloid. Commercial specimens of the extract of wild lettuce, and of the variety of the edible plant known as cos lettuce, obtained from three different sources, together with a specimen of the dried flowery plant of wild lettuce, were all found to contain this alkaloid. On suitable treatment the alkaloid, recovered and crystallized from chloroform, was obtained in silky needles, having the same melting point and other properties as hyoscyamine, the poisonous mydriatic alkaloid existing in belladonna, henbane, and other plants belonging to the natural order Solanaceae. The determination of the gold and the alkaloid in the aurichloride which it yielded afforded results corresponding with the formula of hyoscyamine aurichloride, C₁₈H₂₅NO₂H₃AuCl₇; and the amount of hyoscyamine in the extract of common lettuce does not exceed 0.02 per cent, while in the flowery plant it can not be more than 0.001 per cent. It appears probable that this is the first occasion on which hyoscyamine or any other alkaloid belonging to that mydriatic group has been found in a plant not a member of the natural order Solanaceae, lettuce belonging to the natural order Composite. Prof. Dunstan, in his remarks following upon the reading of the paper, pointed out that it had been known from the time of the Greeks that lettuce had a soporific action, and, as Ladenburg and others had shown hyoscyamine to be a soporific, it was now possible for the first time to explain an ancient Greek practice.—London Lancet.

Facial Paralysis due to Rupture of the Ear Drum.—In the Journal de Medecine de Paris Dr. Delobel records a case of this kind. The patient was thrown from a carriage, falling upon the left side of the head. There was a cut about the root of the nose, and bleeding from the nose and ear. There was no loss of consciousness, will, or of movement; no vertigo, no evidence of fracture. The patient complained of great pain, noises, and deafness in the left ear. This prevented his hearing a watch applied to the ear, though the sounds were heard distinctly when it was fastened upon the forehead or was put into the mouth. Eleven days after the accident complete left sided facial hemiplegia was present. There were disturbances of taste and diminution of sight. Electricity and strychnine were the remedies used. In about two weeks a slight improvement was noticed. All paralysis disappeared by slow degrees, and in time the sense of taste returned. Symptoms pointing to some deep seated lesion of the seventh pair of nerves, as loss of taste and of faradic response in muscles supplied by them, caused the author to regret that he did not use subcutaneous injections of pilocarpine, as suggested by Strauss, to settle at once the question of profound lesion by the absence or delay of sweat on the affected side or its simultaneous presence on both sides.—New York Medical Journal.

The Treatment of Debility, Anemia, and Rickets.—A very common error in the treatment of diseases of defective nutrition is pointed out by Dr. Cheadle in the July number of the Practitioner. It consists in relying wholly or chiefly upon drugs. Children are dosed with iron, phosphates, or cod-liver oil without regard to the condition of the digestive functions or their fitness for the reception of such materials. A delicate child is condemned to cod-liver oil because it is flabby and anemic, without regard to other conditions. Perhaps the appetite is poor, the tongue is coated, and the bowels are constipated. The chief cause of the symptoms in this case is to be found in the disordered state of the functions of digestion, absorption, and excretion. Cod-liver oil and iron are invaluable in their proper place, but here, by intensifying the digestive difficulty and diminishing the appetite, they are likely to do more harm than good. A few doses of gray powder,
followed by a tonic with some saline laxative, will be far more effectual. At the same time the diet must be carefully regulated. When the digestive disorder has been removed, the oil, iron, and phosphates may be found of the greatest value in completing the cure in rickets. Plenty of fresh milk and cream, raw meat, juice, fresh air, and sunlight are much better medicines than any to be found in the pharmacopoeia.

The Neuroses of Development.—Dr. T. S Clouston’s admirable lectures upon this subject that have appeared in various issues of the Edinburgh Medical Journal during the year end in the August number with a few considerations in regard to prevention of the neuroses of development. Heredity is a question of degree and intensity in each case. Fortunately, in most instances it needs an exciting cause to develop the disease which are its outcome. There are one or two general principles safe to follow as making for prevention. Build up bone and fat and muscle, especially fat, by every known means during periods of growth and development. Make fresh air the breath of life to the young. Develop lower centers rather than higher ones when there is poor heredity. Avoid, if possible, alcohol and nerve stimulants. Do not cultivate, rather re-train, the imaginative and artistic faculties and ready sensitiveness and idealisms generally in cases where such tend to appear too early and too keenly. They will be rooted on a better brain and body basis if they come later. Cultivate and insist upon method and order in all things. The weakly neurotics are always disorderly, unbusinesslike, and unsystematic. Fat, self-control, and order are the three most important conditions for them to aim at and develop.—N. Y. Medical Journal.

The A. C. E Mixture.—I began using the A. C. E mixture within a year or two after its first recommendation, and have used it ever since, except in obstetrical practice and for very young children. I have used it for all sorts of patients; for all kinds of operations, minor and major. I recognize fully how insignificant is any individual experience as to anaesthetics, except under very exceptional circumstances, but personal experience always speaks with a loud voice to the person who makes it, and so I may be pardoned if I have acquired strong convictions of the practical advantages and the safety of this mixture. It is to be regretted, of course, that to the three deaths published the number of administrations can not be added, but this is impossible. The mixture is “largely used in England,” according to Buxton. The Lancet speaks of “extensive experience” having demonstrated its efficiency and its far greater safety as compared with chloroform. Adding to these statements the fact of a very considerable use of the mixture in this country, and it is certainly safe to conclude that there has been such an experience with it that no rate of mortality at all approaching to that of chloroform must already have become apparent. I fully believe it to be as safe an anesthetic as any, and one by which the dangers of chloroform and the inconveniences of ether are alike avoided.—Dr. J. C. Reeves, Kansas Medical Journal.

Fetid Perspiring Feet.—Dr. Bordet gives the following formula:

French chalk.......................... 40 parts;  
Subnitrate of bismuth.................. 45 parts;  
Permanganate of potassium......... 13 parts;  
Salicylate of sodium................. 2 parts. M.

This powder should be dusted daily into the stockings. The feet should be washed every morning and evening, and after washing rubbed with alcohol.

The method of treatment recommended by Unna is as follows (Pharm. Era):

Ichthyol............................... 5 parts;  
Turpentine............................. 5 parts;  
Zinc ointment......................... 10 parts. M.

Apply after the feet have been bathed in water, to which a little vinegar, mustard, or spirits of camphor has been added.

During the day they may be dusted with the following:

Powdered mustard...................... 1 part;  
French chalk.......................... 30 parts.

The Antipyrin Habit.—Dr. Combernale relates, in the Bull Med. du Nord, No. 12, 1891, that a servant girl suffering from polyarticular rheumatism of long duration was treated with antipyrin, which she took in dose of fifteen grains daily, and this amount was increased to thirty or forty-five grains on her day of fatigue. Without this excitant she suffered from general depression, stiffness of the fingers, and swelling of the feet. For this reason she continued to take the drug regularly for four years. At the expiration of this time she showed signs of round ulcer, with pharyngeal cough, general muscular weakness, nocturnal agitation, insomnia, and amenorrhea. The drug was left off gradually, and all these symptoms progressively disappeared.

Relative Value of Hypnotics.—Dr. Sidney Short communicates a report on the hypnotic action of urethane, sulphonal, and para-ethylidine clinically considered. He finds that but little effect is produced by these drugs upon
cases of sleeplessness due to pain. In a case of thoracic aneurism, in which the pain was not very severe, sulphonal in doses from 10 to 20 grains had no effect whatever. Five out of seven cases of heart disease were greatly relieved. The drugs gave good or fair nights in cases of bronchitis with cardiac failure, and in this class of cases, when opium is contra-indicated, the drugs will probably prove useful.—Birmingham Medical Review.

Typhoid Fever.—In an interesting article on this disease, Burney Yeo mentions with approval the following prescription by Dr. Wilks:

- Sulphurous acid........................... \[3\] xx;
- Water........................................ \[3\] ;
- Syr. aurant. cort........................... \[3\] j.

Sig: At a dose every four hours.

Yeo has tested chlorine water, and obtains excellent results. His prescription is as follows:

- Potass. chloratius......................... gr. xxx;
- Ac. hydrochlor. fort...................... \[3\] vi.

Place in a 12-ounce bottle, and cork. When filled with gas, add water gradually, and shake. Then add:

- Quin. sulph......................... gr. xxiv-xxxvj;
- Syr. aurant. cort...................... \[3\] j.

Sig: One ounce every two, three, or four hours, according to the severity of the case.

Male-fern is not an entirely harmless remedy, though long in use, and one of the best of anthelmintics. Dr. Eich does not favor the usual method of giving the drug fasting, since when the stomach is empty the absorption of the toxic principles into the general system is facilitated and poisonous symptoms may occur. Several fatal cases of poisoning are reported. The ethereal extract contains poisons which act upon the central nervous system, a tetano-toxin or tetanus-producing body playing an important rôle. The dose of ten grains, or two and a half drams, should not be exceeded.—Medical Record.

Prof. Hare says that for fainting, as a rapidly acting stimulant, give alcohol, hot and concentrated. The hot alcohol acts much more quickly than cold, because the cold alcohol, before it could be absorbed, must be heated up to the temperature of the body.—College and Clinical Record.

Attacks of Tremor among Epileptics.—Dr. Feré notes in the Revue de Médecine for June 10, 1891, the different aspects of tremor among epileptics. It may be merely an episode in the classic epileptic seizure or the only symptom of a paroxysm, with loss of consciousness. Sometimes tremor lasts for hours or days, either general or local. It is usually rapid, especially in the hand, the oscillations ranging from seven to ten a second.—New York Medical Journal.

Eczema and Psoriasis.—To remove the abnormal scaly formation of the skin and assist other treatment, the following has been found remarkably successful:

- Papoïd........................................ \[3\] 5ss;
- Boracic acid.............................. \[3\] 5ss;
- Glycerin................................. \[3\] q. s. to make a paste.

Apply night and morning, allowing the paste to dry on the skin.

It has been reported that the above alone will cure nearly all cases of eczema.—Dr. W. M. Fleming, New York.

Quinine Poisoning.—Dr. A. Erlenmeyer reports in the Centralblatt für Nürveenheilkunde a case of poisoning with this drug which is of some interest. The author had previously observed abolition of the reflexes in several patients who were taking large doses of quinine, but in the case under consideration the symptoms were those of an intense reflex irritability. The patient, aged forty-two years, had taken at one dose a gram of quinine (about fifteen grains), and on the following day two grams in divided doses. Examination of the reflexes at this time, by tapping and the other tests, brought on general convulsions, with violent contractions of the arms and the whole body. Leaving off the medication for twenty-four hours would cause a disappearance of the nervous excitability.—New York Medical Journal.

Syrup Trifolium Compound.—In the Medical Age, Dr. W. Thornton Parker writes of the success which has attended his use of this preparation in upward of one hundred cases, mostly obstinate rheumatic affections. He instances especially four cases in which the remedy proved of marked benefit—one of chronic eczema, a second of severe and obstinate rheumatism, a third of menstrual disorder associated with profound anemia, and the fourth a case of tertiary syphilis.

Boro-Borax.—According to Lyon Medical for January 3d, this is a compound, discovered by Jaenicke, formed by mixing equal parts of borax and boric acid in boiling water. It is a crystalline, neutral body, of great solubility in comparison with boric acid, sixteen per cent dissolving in cold water, about thirty per cent in water of the temperature of the blood, and seventy per cent in boiling water.
THE AMERICAN PRACTITIONER AND NEWS.

The American Practitioner and News
"NEC TENUI PENNA."

Vol. 13. SATURDAY, FEBRUARY 13, 1892. No. 4

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Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price $3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

Books for review, and all communications relating to the columns of the journal, should be addressed to the Editors of the American Practitioner and News, Louisville, Ky.

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THE FAMINE IN RUSSIA.

The following correspondence between Clara Barton, President American National Red Cross Association, and Dr. Walter Kempster, who with Col. Weber has recently made a tour of the famine-stricken districts of Russia, tells a story of sorrow so plainly and so touchingly that it must go to the heart of every man who reads it and loves his kind.

It is true that great calamities move us only when we are near to them. The accounts of the drowning of a million Chinese by an overflow of the Yellow River, or the starvation of several hundred thousand Hindoos in Bombay are read in the morning paper, over rolls, chops, and coffee, with as little emotion as the reading of the latest deal in railroads or scandal in society. This correspondence brings the matter near enough for realization of the situation, and we doubt not will help to stir up our readers to active duty in the matter.

No class of men are more free-handed in charities than doctors, and it goes without the saying that the appeal of the Russian Relief Committee, now extensively circulated, will not plead with this class of men in vain.

Dr. Walter Kempster:

Dear Sir—Referring to our conversation in regard to your recent visit to the famine-stricken districts of Russia, may I ask if you will kindly give me a statement describing the real condition of the peasants. Your testimony and that of your associate, Col. Weber, will help us better to understand the true state of this suffering humanity.

Your large professional experience gives you the right to speak in plainest terms of what you know and have learned from trustworthy sources regarding the needs of these unfortunate people.

Very truly,

CLARA BARTON,
President American National Red Cross,
Washington, D. C., Jan. 27, 1892.

Following is Dr. Kempster's reply to Miss Barton's request:

Miss Clara Barton:

Dear Madam—Your favor asking me to describe the real condition of the peasants in Russia, as observed by Col. Weber and myself during our recent trip through that country, etc., is at hand.

To describe their actual condition would be to write a chapter of horrors that I do not feel myself competent to do.

Starvation is more widespread and desperate than the officials seem willing to acknowledge, or than the world understands. The public has been led to believe that the famine is restricted to the provinces of Eastern Russia alone, and is spoken of in the journals as "the famine of the Volga."

As a matter of fact the famine is general, and the area of the famine district would be best described by saying that nearly all the territory south of a line running east and west through the latitude of St. Petersburg, and comprising the entire area from the western to the eastern border of the empire, a territory nearly equal in size to the United States of America, is the famine district, containing a population of more than 35,000,000 souls.

It is true that in a few provinces within this area a small crop of grain was harvested, but it was sold and shipped out of the country before the officials acknowledged the existence of famine anywhere. The peasants live upon coarse rye bread and cabbages, rarely any meat in the best of times, and it is the failure of the rye crop that has caused such widespread starvation; and there is nothing to replace it for little corn is grown.

The most appalling condition exists in those provinces near the Volga; but before I left the country in September last I saw men and women in the western provinces, hollow-eyed, gaunt, despairing; starving children crying for a bit of black bread, which was then grudgingly given; and that awful cry of the men, "We are starving, we are not beggars, give us work or bread," can never be forgotten.

The condition must be much worse now, because they have added to the calamity the piercing cold of a long winter.

I would suggest that your supplies be shipped direct to Libeau, thence by rail to a depot, say at Smolensk, where converging lines of railway will make distribution more rapid.

The supplies must be sent away from the stations on sleighs or wagons across the country, for railroads are not numerous, and the population is scattered in numberless small villages.

I would venture to suggest that corn should be sent, for the reason that it is so much cheaper than wheat or rye, while its nutritive quality is equal, and you will therefore save many more lives by sending the lower-priced grain.
Whatever you do, let it be done quickly, for while you wait hundreds are dying of starvation and its twin horror, famine fever.

Wishing you God speed in your noble work, I am, very respectfully,

WALTER KEMPSTER.
WASHINGTON, D. C., Jan. 28, 1892.

Notes and Queries.

MOLIÈRE AND THE MEDICAL PROFESSION.—The presidential address presented at the last meeting of the Ohio State Medical Society deals with that greatest satirist of the medical profession, Molière. Its author is Dr. Conklin, of Dayton, and the address may be found in the Transactions of the Society, just issued.

Molière's true name was Poquelin, Molière being that adopted by him during the ten years of his life when he was a strolling player. It was some time in the year 1658, when he was thirty-six years old, that Molière emerged into the sunshine of court recognition. Then it was that the long-coveted opportunity, an invitation to play before the king, came, and grandly did Molière's genius plume its wings for dramatic flight. During the fifteen years that embraced the true career of the dramatist the favor of Louis was unshaken, and it was rewarded by that brilliant series of comedies which mark an era in French literature. In that time Molière composed thirty pieces, half of which are classical. The later ones are the best, for in them he found the true field of his genius, the portraiture of the Tartufes, Sganarelles, Dandins, Argans, and other perennially true types of human character.

Dr. Conklin's contention is in Molière's favor as against the views commonly pronounced by the critics. Nearly all commentators assume that Molière was actuated by an implacable rancor against physicians and their calling. A careful study of his writings, of the friendly tenor of his life, and of the state of the times will prove that this harsh indictment has been overdrawn. The two great objects of the dramatist were the selfish one of maintaining court favor and the intellectual one of exercising his creative faculty as poet and comedian. If he failed to keep the king amused and to make the people laugh at his characters, he would be relegated to the strolling profession. His genius impelled him to chastise the shams and hypocrisies of his time. He hated cant and pedantry, and attacked every station of life, from the highest to the lowest, that exposed these frailties to his view. Without rancor, with very little of avoidable personality, and without partiality, he made the nobles, the church, the doctors feel the sting of his satire where they were most vulnerable. "The shafts of his humor, like the arrows of Tell, pierced the foibles at their center, without wounding head or heart."

Molière had not a few intimate friends among the physicians of the court, some of whom were under discipline by the Faculty of Medicine for the use of antimony and other chemical innovations. Molière had very little of sarcasm to expend upon the faction addicted to the antimonial "irregularity," but the phlebotomists of the academy are never spared. They are ordinarily represented as ignorant pretenders, speaking in mongrel Latin like that which, in Le malade imaginaire, is put into the mouth of the candidate who has a stereotyped answer for all questions about the treatment of diseases:

"Clisterum donare.
Postea seignare.
Ensuita purgare,"

and in the event that this treatment fails, he next replies, "Reseignare, repurgare et reclysirisare."

Medical sects and dissensions abounded, and physicians carried on their controversies with all the acrimony of theologians. The sickroom was the scene of many an unseemly quarrel, from the death-bed of Cardinal Mazarin down to the cot of the coachman. These scenes were the legitimate prey of the satirist, and they became immortal in the text of L'Amour médecin and Le malade imaginaire. The latter was composed by Molière when his health was rapidly failing and the shadows were gathering about him. It is a dying comedian's sarcasm on the impotence of the medical art against life's last ebb. His health had been precarious for six years; he was annoyed by cough and hemorrhages, due either to aneurism or to pulmonary phthisis. "How much a man suffers
ere he dies!” was his weary exclamation when on his way to the theater on the evening of his death. Under these circumstances, and others of an embittering nature, it is not surprising that he gave vent to satire and bitter invective against the art that failed him at the pinnacle of his genius and renown. “You have a doctor,” said the king to him when they were walking together in the royal garden, “what does he do for you?” “Sire,” he replied, “we walk together, he prescribes remedies which I do not take, and I get well.” But medicine may be said to have obtained a poetic revenge against Molière, since his death-blow fell upon him in immediate connection with his fourth rendering of the *Malade imaginaire*. He was taken violently ill while on the stage, and was carried to his deserted home, where he died in less than an hour, suffocated by a pulmonary hemorrhage. He thus literally materialized the dismal prediction which he had put into the mouth of Argan, in the play last mentioned, when saying that Molière would get only his deserts if the physicians “would let him die without medical assistance.” He died without assistance, but not for the reason stated by Argan, “and that will teach him another time not to make fun of the Faculty.”

To sum up the case as stated by Dr. Conklin, “Molière was a man of genius, with many traits of true nobility; he hated a lie, a sham, a miser, and a bigot.” He could not fail to see the foibles of his time, and he had the courage and ability to chastise them. “Nothing was too humble or too sacred for his purpose. The doctors were fair game and easy to ridicule. Everybody, when well, laughs at doctors, and no one—not even the doctors—is seriously the worse for it.”—*New York Medical Journal*.

**A Lesson for the American Medical Association.**—During late years there has come into vigorous existence a series of national medical organizations founded upon practically two ideas, viz., scientific work and good fellowship. Upon these rest all the national special societies, the American Congress of Physicians and Surgeons, the Southern Surgical and Gyne-
cological Society, the Tri-State Medical Association, the Mississippi Valley Medical Association, etc. All these bodies advertise as their attraction the avoidance of every thing that complicates their scientific work and good fellowship. Their special advocates say that they leave all disagreeable and unprofitable controversies, all waste of time in attempting the impracticable and the impossible, to the American Medical Association.

In view of this state of things, many friends of the American Medical Association have been inquiring why the Association does not put aside all features that are unprofitable and disagreeable. They would like to know why the entire time of the meeting of the Association is not given over to scientific work and the promotion of good fellowship. They ask: Is there need for other objects than these in a medical society? They would like to have stricken from the general sessions of the Association profitless debates upon points of order, upon hair splitting differences, upon questions of no interest to the masses and of no profit to the Association or the profession. They would like to have eliminated from the general meeting all general addresses, for the reason that it is impossible for one individual to prepare an address that shall interest the mass of the Association. They would like to have all the routine business not now in the hands of committees or officers committed without debate to a representative business committee for examination and report, the report to be accepted or rejected without debate. In short, they would like to have the general sessions of the Association divested of every thing unprofitable and uninteresting to the masses of the delegates. They would have all matters of scientific import go at once without debate to the Section devoted to the study of this subject; all matters of difference in the social and professional relations of members to go, as now, to the Judicial Council; all matters of publication and finance to the Journal Trustees, as now; and all other matters of business to a representative business committee. The addresses of welcome should be as brief as possible, as well as the words of thanks. Were such a programme carried out, one hour daily would suffice for all
the work of the general body of the Association. The rest of the time could be occupied as follows: Section work could begin at 9 a.m. and close at 12 m.; the general Association could meet for one hour, from 12 m. to 1 p.m.; after dinner or lunch, the Sections could meet at 2:30 and continue till 6. The entire evening could be devoted to social purposes in promoting good fellowship by personal acquaintance of members one with another.

From a somewhat extensive acquaintance with the profession, we are certain that such a programme would prove very attractive to the great majority. It would practically wipe out the occasion for unpleasantnesses now existing, and promote a substantial progress in both the quantity and quality of the scientific work accomplished by the Association. As a result the Journal would be rendered more valuable, and so more profitable. All delegates attending the meetings would feel that they had been fully compensated for their trouble and expense. There would be the fewest soreheads and the largest number of happy individuals. All of these and many other good results would attend such a change as would place the Association upon a par in its methods of doing work with societies of more recent organization. If the Association were to be formed to-day it certainly would adopt methods along lines such as indicated. The difficulty now is to secure a change in the old methods which harmonized with the conditions of forty years ago.—American Lancet.

**Sir Andrew Clark's Method of Teaching Clinical Medicine.**—Dr. Clark is known as a most skillful physician and able teacher of medicine. In a recent lecture (London Lancet) he discusses the several methods followed by clinical teachers, and then describes his own. He says "that the criterion of true instruction is not acquiring but thinking. Genuine clinical teaching requires the active cooperation of teacher and student, the assimilation as well as the acquisition of knowledge; seeing, handling, doing as well as trying, failing, and succeeding."

Dr. Clark's method is "to help his students to get plain, practical clinical instruction, and so to get it that they may pass from the hospital into practice accustomed to its methods and cantions, without fear of disaster, and ready for sound, honest work."

An unknown case is brought before him and his class, and he proceeds to deal with it as nearly as is possible in the same manner as he would in private practice.

He lays importance upon always following a definite plan of procedure; it may not be the best, but it is far better than no plan. He first asks the patient to tell the symptoms of which he complains, how long he has been ill, and in what way his illness began. Secondly, he endeavors to learn from the patient the number and nature of the troubles he has suffered in the course of his life. Thirdly, he makes the acquaintance of the medical history of the patient's family.

Having acquired this information and found the patient's statements point to the lungs as the chief seat of the malady, he investigates these organs with all the modern aids to diagnosis. This completed, he separately investigates the conditions of the circulatory, digestive, genito-urinary, cutaneous, and nervous systems. Thus he ascertains the manner and degree in which the constitution is being affected by the disorders or diseases which may have been brought to light.

Now he is able to state in order the symptoms of disorder of the disease which may exist casually or independently elsewhere than in the lungs. He is able to elicit their relations, to interpret their meaning, and to set forth their bearing upon the future course and complications of the case.

Now he can discuss the probable nature of the malady and frame the diagnosis. This done, he considers the probable future of the case, settles the report to be made to the friends, and finally determines the treatment to be pursued. From time to time the case is re-examined in order to correct or confirm the diagnosis, to determine the way in which the disease is going, and to consider the use or uselessness of remedies.

Dr. Clark assures his students that "if they adopt this plan, if they follow it step by step, follow it uninterruptedly, and if they bring..."
all their collateral knowledge to bear upon its development, they will be preserved from confusion in emergencies, they will acquire a growing interest in their work, their minds will have formed a precious habit, their whole nature be lifted up, and in due season their labors will yield fruit both abundant and good. Further, in the carrying on their work in this manner they will have trained their understandings, disciplined their hearts, and exercised their wills to the utmost of their capacities. They will become cultivated men, and be able to hold their own on topics of mutual concern with the public in the gate, and they will be prepared to deal successfully with those problems of the moral life from which few cases of disease are entirely exempt."

We heartily congratulate Dr. Clark’s students upon the rich instruction they receive at his hands. There are but few genuine teachers of medicine after his pattern, and those that are favored with their instruction should be doubly grateful.

All clinical teachers could not fail to do better work by the study of Dr. Clark’s method. Unfortunately very much of clinical teaching is designed to pilot patients into the consulting room of the teacher, and not for the education of the student, so that he may become an independent, wise, efficient physician. For such the methods pursued by Dr. Clark will have no attraction. Only for those who love to teach medicine so that their students may become physicians of the highest type will Dr. Clark’s lesson come as a welcome gift.—Ibid.

Dust and Dusting.—"It is our littleness that sees no greatness in a trifle." This is true if success is a multiple of careful details. It is true, therefore, of perfection in every art and work, even the commonest, and among such a contemporary has assigned a place to the seemingly menial art of dusting; for, as he says truly enough, there is an art in dusting, and it is one which on every ground deserves far more studious cultivation than it usually receives.

Different observers have from time to time described the components of ordinary dust, and these, it is needless to say, exhibit special characters in almost endless variety: Mineral matter, animal and vegetable debris, morbid germs, whatever in fact is light enough and small enough to remain for a time suspended in air, come under this common and generic but far from harmless term. The spread of cholera and exanthematous diseases has no doubt with perfect truth been attributed to its influence. It is clear then that the method to be employed for its removal is a matter of some importance. As regards this we need hardly discuss every suggestion of housewifery. Some would pin their faith, not without reason, to the damp duster rather than the dry one, but this will not suffice in itself, and moreover every kind of furniture does not bear such treatment. Where possible it is of the two the more effectual plan. Above all, however, it is needful to remember that the object aimed at is not displacement of dust only, but its removal, and for this purpose a combination of thorough daily ventilation by open doors and windows with careful sweeping, followed by at least displacement of any dust still remaining with a cloth, is the only method alike feasible and effective. All overcrowding with furniture or with woven fabrics is to be avoided. Bed curtains and vallances are no less objectionable, and bare floors are more wholesome than the choicest carpet. Nowhere is care in these particulars more justified or more imperative than in the crowded homes of the poor. Let us but mention one other point, the healthy effect of sunlight. It is now admitted that some disease germs lose their power on exposure to light. In this fact we have a standing protest against the custom of darkening rooms with lowered blinds, or that esthetic error which covers the window space with crossed curtains. London Lancet.

The Health of Veterans, or Twenty-five Years after the War.—Dr. John L. Billings, of the army, has contributed to The Forum, for January, a brief study of the health of the survivors of the war, as judged by data compiled under the eleventh census. The author’s intention is to show with regard to the troops of a single State, Massachusetts, what may at some future time be worked up for the Northern States as a whole. In that State about 40,000 veterans were reported as
living on the first of June, 1890. These form about one eighth part of the white male population over forty years old. Hence, if they were all equally healthy, the number of sickness cases reported by the census should be seven times as great among the latter as among the former. But the census indicates that there is four times as much sickness among veterans as among other males of the same age. Among the insane, however, the veterans furnished a much smaller proportion than the other males over forty years of age. The sickness statistics were especially high among the veterans from diarrhœal diseases, rheumatism, and heart disease. This fact might have been been anticipated, and may, in part at least, be set down as one of the entailments of service in the field. Dr. Billings infers that while the health of some men has been improved by their war discipline—even to the extent of the preservation of lives that would have been lost if their owners had remained at home—the health of the average has been impaired by the exposures of the soldier's life. The veteran has a greater number of days of sickness than other men of like age-period, and of course has a somewhat less expectation of life. This conclusion, being based on the census results for a comparatively small territory, is not regarded by Dr. Billings as other than a provisional one. Fuller data may considerably modify these inferences. It is not impossible also that the replies obtained by the census gatherers may have taken into account the minor pains and disorders of veterans and pensioners which other men might not mention. This would be likely to apply with especial pertinence to those men who are applicants for pension relief. — *Journal Amer. Med. Association.*

**Influenza a Hundred and Sixty Years Ago.** — An Italian correspondent reminds us of the historic epidemic of influenza in Milan between the years 1730–33, described by the contemporary physicians, Drs. Gagliardi, Bellegatta, and Crivelli. The last named, a Milanese practitioner in advance of his time, found in the air the "chief and efficient cause of the influenza visitation." In 1730 and 1733 the climatic conditions were as nearly as possible the same as those prevalent in the last two epidemics in Italy; that is to say, a mild temperature, the sirocco wind predominant, and much humidity, with fog and rainfall alternating. Dr. Crivelli's description of the symptoms of an influenza patient might (our correspondent says) be transcribed from the phenomena of to-day: "Gravedo and coryza, general languor, with indisposition to exertion of any kind, loss of appetite even in presence of the daintiest viands, pain in the sinciput, giddiness, dimness of eyesight, high fever with rigors and *horrripilatio* extending over the whole body; cough sometimes moist, sometimes dry enough to induce a choking sensation." These symptoms, not very grave in themselves, says Dr. Crivelli, are apt to reach an acute and even pernicious stage, "the patient finding himself suddenly oppressed with a suffocating catarrh (*un catarro soffocativo*), or, in other cases, with a pleurisy, or a pleuro-pneumonia. One patient falls as by an apoplectic stroke, another complains of intolerable cephalalgia—the old, the phthisical, the asthmatic rarely outliving the storm." It would be difficult to give a truer account of the course and issue of the influenza cases now occurring at this hour in the Alta Italia. Dr. Crivelli further shows himself ahead of his age in his severe condemnation of indiscriminate venesection, stigmatizes the abuse of diluents, and rests his system of treatment on vigilantly regulated diet and the support of nature. Of course, he used heroic measures when time was precious—even bloodletting when engorgement of the circulation was a distressing symptom—and he found great efficacy in the Hippocratic prescription: "*Alevus eurana est per olys driven subducentum et frigefacientem.*" Other less rational measures he also recommends, taken from a pharmacopeia happily superseded. But, according to the lights available at the time, he seems to have been a thoughtful and ingenious clinician, and his treatise has quite a special interest for the student of the history of medicine. — *London Lancet.*

**Percentum Solutions in Pharmacy.** — Perhaps, because few physicians are in the habit of prescribing solutions of percentage strength, a difference between medical and pharmaceutical
arithmetical in this respect seems to have generally escaped notice. The physician will probably suppose that in prescribing 48 grains of a soluble salt to a fluid ounce (480 minims) of a dissolving menstruum he is ordering a ten per-cent mixture; but if he write simply for a fluid ounce of a 10 per cent solution, he (or rather his patient) will usually get but 45.6 grains of the medicament. This not inconsiderable discrepancy arises from the apparently common pharmaceutical practice of reckoning a fluid ounce by weight, instead of by measure, as 456 grains, and computing percentages on the latter basis. For example: A well-known firm of manufacturing chemists label their tablets of cocaine muriate with the information that "each tablet contains 2.25 grains, . . . or the required quantity to form, with 1 fluid dram (57 grains) of water, a 4 per cent solution of the salt." Without dwelling on the minor circumstance that 4 per cent of 57 is 2.28 instead of 2.25, it is evident that since we measure our dosage (especially for subcutaneous injections) by minims, not by grains, one of these tablets in our 60 minim dram gives us a 3.75 per cent instead of a 4 per cent solution. Of course, as the quantity and strength of the solution are increased, the deficit becomes greater; the difference between the two methods of estimating a fluid ounce of a 20 per cent solution amounting to nearly 5 grains of the salt. Many similar instances might be cited, and on the score of accuracy it might be further suggested that the stated weight of a fluid ounce applies only to distilled water at a fraction over 39° F. Enough, however, has been said if the attention of physicians be directed to the importance of calculating for themselves whether the manufacturer's dosage of potent drugs be that which they wish to administer.—Alfred L. Carroll, M. D.

Editors American Practitioner and News:

A Concours will be held at Rush Medical College, beginning Tuesday evening, March 1st, for the purpose of filling the positions of Lecturer on Anatomy and on Materia Medica and Therapeutics in the spring Faculty.

The spring course begins March 31st, directly after the close of the regular term, and continues two months, with a class of from two hundred and fifty to three hundred students, thus affording the lecturers an excellent opportunity to exercise their skill as teachers.

It is the policy of the college, so far as practicable, to fill vacancies in the regular Faculty from the corps of spring instructors. Nine of the present members of the regular Faculty have been selected in this way.

The Concours will consist of twenty-minute lectures by each of the applicants before the Faculty, students, and local profession upon subjects pertaining to their branches, which will be furnished by the professors of Anatomy and Materia Medica and Therapeutics a week before the contest. E. Fletcher Ingals, Chicago, Feb. 9, 1892.

Prof. Bilroth (Medical Press), in a speech, said that he recognized three classes of teachers that swayed the public in morals and culture, whose duties were tolerance, peace, and humanity. The priest has the power of the church behind him; the advocate the protection of the law, under the authority of the State, with the support of his "chamber;" but the doctor, dangling in mid-air, between heaven and earth, with nowhere to rest, his habitation from door to door, with no more protection than any other burgher, no protection beyond individual caprice, may be injured without any hope of redress.

The Forty-third Annual Session of the Medical Association of Georgia will meet in Columbus, Ga., on April 20th, 21st, 22d. The officers are: President, G. W. Mulligan, M. D., of Washington, Ga.; Vice-Presidents, James M. Hull, M. D., of Augusta, Mark H. O'Daniel, M. D., of Macon; Treasurer, E. C. Goodrich, M. D., of Augusta; Secretary, Dan H. Howell, M. D., of Atlanta, Ga.

It is said that recently a man died at the Keeley Institute at Hot Springs, Ark., shortly after taking his first hypodermatic injection from the physician in charge. An investigation of the matter may bring to light the composition of the substance injected.—American Lancet.
Dr. E. R. Squibb prints his price list in accord with the metric system, so that he is preparing physicians to understand the new Pharmacopeia. We have wondered how many physicians make any practical use of any of the Pharmacopeias. Practically, it would seem that, as a rule, they absorb what little they do know of this publication from their druggists.

**Hypnotism in Belgium.**—The Court of Appeal in Brussels has recently had before it a case where three persons had been sentenced to eight years' imprisonment for having practiced medicine, illegally employing hypnotism for the cure of various affections. Much to the surprise of the medical profession, the appeal was allowed and the prisoners discharged. *London Lancet.*

The difference between drunkenness and inebriety is stated by M. Trelat thus: "Drunkards are people who drink whenever they find an opportunity for drinking; persons affected with inebriety are diseased, and drink only when the attack seizes them." Drunkenness is a vice; inebriety is a disease.

The discovery of the bacillus of influenza by a son-in-law of Dr. Koch, Dr. Pfeiffer, is announced. It is the smallest of these organisms yet discovered. In six cases he has successfully transplanted it.

Dr. John A. Thacker died at his Cincinnati home, December 19, 1891, aged fifty-nine. He was perhaps best known as the founder, editor, and proprietor of the Cincinnati Medical News.

A Medical student in Chicago was fined last week for practicing medicine without a license.

**Army and Navy Medical Intelligence.**

**Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from January 24, 1892, to February 6, 1892:**

Capt. Henry G. Berton, assistant surgeon, U. S. Army, having been found incapacitated for active service by an Army Retiring Board, is granted leave of absence until further orders, on account of disability.

The order relating to Capt. Aaron H. Apple and First Lieut. Julian M. Cobelli, assistant surgeons U. S. Army, is suspended until further orders.

Lieutenant Colonel Joseph P. Wright, surgeon, U. S. Army, is relieved from duty as attending surgeon at the Military Prison, Fort Leavenworth, Kansas, and will repair to San Francisco, California, and assume the duties of acting assistant medical purveyor, taking charge of the medical surveying depot at that place, and relieving Lieut. Col. George M. Sternberg, surgeon, U. S. Army, who upon being relieved will proceed to Governor's Island, N. Y., and report in person to the Commanding General, Dept. of the East, for duty as attending surgeon and examiner of recruits in New York City.

Major John Brooke, surgeon, U. S. Army, is granted leave of absence for twenty-eight days.

Captain Aaron H. Apple, assistant surgeon, U. S. Army, granted leave of absence for twenty-three days.

First Lieut. Henry D. Snyder, assistant surgeon, now temporarily serving at Fort Reno, Oklahoma Territory, is assigned to duty at that post. First Lieut. Samuel R. Dunlop, assistant surgeon, is relieved from duty at Fort Sill, Oklahoma Territory, and assigned to duty at Fort Supply, Indian Territory, where he is now temporarily serving.

**SPECIAL NOTICES.**

At the stated meeting of the Medical Society of the County of New York, on Monday, January 25, 1892, the subject for discussion was the epidemic of influenza.

The discussion was opened by Dr. Janeway, and after addresses by Drs. Jackson, Draper, and Robinson, Dr. Francis Delafield addressed the Society on the treatment of influenza. He stated as follows: The treatment consisted of putting the patient to bed and seeing that he was well nursed and had proper diet while the disease was running its course. It was possible, however, for the physician to interfere with advantage in the case of certain complications. Of all the remedies suggested for the treatment of influenza and its complications, such as severe headache or neuralgia pains, etc., he had found nothing so reliable as phrenectomine in doses of five grains every two hours. The catarhal throat trouble, which is often present, he had treated successfully with aconite or salicylate of soda, with a solution of cocaine for local applications.—*Medical Record.*

My experience with Terraline has been most satisfactory, as results shown in all cases of pulmonary complaints treated with it demonstrate its superiority over any remedy hitherto tried. I have recommended it to my professional friends.

J. H. Wheeler, M. D.

No 309 54th Street, New York City, N. Y.

I have used Terraline in my practice for a year, and can speak in the highest terms of it. It does not nauseate like Cod Liver oil. It digests easily and causes no eructation from the stomach. I give it when the cough is heavy, tight, and painful. It gives perfect satisfaction. R. W. St. Clair, M. D.

No 668 Willoughby Avenue, Brooklyn, N. Y.
Original Articles.

UNCURED GONORRHEA.*

BY E. R. PALMER, M. D.
Professor of Physiology, Pathology, and Histology, in the University of Louisville.

The object of this paper is not to advance any new doctrine, but rather to lead to discussion and an expression of views on the part of the members of the Society.

"The whirligig of time brings wondrous things to pass." Nowhere is the truth of this adage more forcibly illustrated than in the attitude from which both the profession and the laity view to-day the two great venereal diseases as to their curability and the influences, near and far, that they exert upon the present sanitary aspect of society. Scarcely a quarter of a century ago, to become a syphilitic was, in both the popular and the professional mind, to be cursed with a curse inferior only to the scourge of leprosy, while the prevalent expression as regards a clap was, "I would as lief have it as a bad cold." A little over twenty years ago Van Buren declared, and, I am safe in saying, startled all with the declaration, that "more people die of gonorrhea than do of syphilis." And when Noeggerath, following him, said that a man never recovers from a clap, and that nine tenths of the women who marry men who have had gonorrhea become subjects of painful and incurable inflammatory diseases of the uterus, tubes, or ovaries, every one scoffed or laughed at him as a visionary and irrational sensationalist.

What is the status of comparison as between these two diseases to-day? Prof. Conner, in a paper on late syphilis, read before the American Congress of Physicians and Surgeons at Washington, says of this disease: "The intensity of its action has been so lessened that in two thirds—it may be four fifths, some would have us believe nine tenths—of the cases to-day the duration of the attack may be measured by weeks, at least by a few years, and its severity is so slight that we might almost speak of the benignity instead of the malignity of the disease." While Dr. Culver (Venerereal Diseases; Culver and Hayden), in the most recent of American publications on gonorrhea, says, "It is unsafe for a physician to promise a cure under ten to sixteen weeks, and even then complications may occur which will still further lengthen the disease to many months." A statement that is not only echoed by the many specialists who are striving, so far in vain, to devise a rational means for its rapid and radical cure, but is even more forcibly illustrated in the widespread application, in capital operations, of antiseptic surgery for the relief of the army of sufferers, victims of its insidious invasions.

Just as a scientific application of urinalysis has cut down the so-called apoplexies of a former age, and increased the factor-ship of renal lesion as a cause of mortality, so has a study of the nature and sequelae of an ordinary gonorrhea directed universal attention to its frequent bearing on the grave and often mortal diseases of both sexes, so that to-day we echo the assertion of Van Buren, and bow to Noeggerath as the first apostle of a new belief.

With syphilis on the wane so far as its virulence is concerned, with the profession almost at accord in the matter of its treatment, what a cloudy obverse is presented as regards its
unconstitutional brother! To say of its treatment that "all things new are not true, and all things true not new," would, I regret to say, not be overstepping the halo bounds of the truth.

It is not, however, my purpose to-night to weary you with a recital of the therapeutic measures innumerable, old and new, radical and palliative, that have "had their day and passed away." I am neither prepared to launch a new specific nor to announce my alignment in innocuous desuetude with the stoical school of palliators. What I wish is to call attention to some of the conditions that are responsible for its always obstinacy, its oftentimes incurability.

Gonorrhea is a dual infection; streptococci and diplococci are always present in every typical case. The facts, that the former without a phagocyte environment may and do go everywhere, and that the latter do not penetrate the submucosa, but love the cylinder epithelium, are as nothing arrayed against the clinical fact that a man once the victim of an obstinate clap may perhaps never be said to be absolutely free of that slumbering essence of disease that excesses of various kinds may quite likely awaken to a dangerous activity. Allowing for argument's sake that the surface loving gonococcus is alone responsible for a contagious urethritis, a moment's study of the arrangement of that canal will serve to show how far all present local measures must fall short in efforts at its eradication. From the fossa navicularis to the sphincter vesice interna way-paths and pitfalls innumerable present themselves. All along the spongy tract are the narrow sinuses of Morgagni, some nearly an inch long, studded throughout their whole extent with the racemose follicles of Littré, hidden away in mucosal folds that the most pernicious injection may never hope to flush. Confined to this portion alone, the di-case but too often baffles for months our best endeavor. Yet here, least of all, is the malady to be dreaded, as here as long as it exists does it manifest its presence by the visible signs. It was a happy thought on the part of some man of Saxon bent who attacked that array of high-sounding terms, ejaculators, accelerators, detrusors, etc., and boiled them down into the expressive commonplace, "the cut-off," while hardly less valuable was the introduction by some German, I think Ulzmann, of the demonstrative glass test in the study of clap behind the cut off, of posterior urethritis. The revolution that this simple expedient has worked has killed the "bad cold" analogy and placed in the hands of the victim a ready refutation of the claims of that doctor who can "cure any case of gonorrhea in from two to ten days." Once instructed in what a posterior urethritis is and what the cut-off muscle does, the unfortunate youth of to-day, with sorrowful eyes and sinking heart, gazes each morning on the tripper fiden in the tell-tale bottle, and knows full well that while the running may have ceased the enemy still holds the inner forts and that the end is yet far from being reached.

If the racemose follicles in the pits of Morgagni are a reason for obstinacy in an anterior urethritis, how much more numerous are the pitfalls deeper in. What injection can we hope to carry from the urethra through narrow ducts an inch long into the complex glands of Cowper; or who that realizes the muscularity of prostatic tissue can hope to surely overcome by wash or drop, however deftly applied, the grasp these fibers exert on the necks of this organ's many mucous flasks? From the sinus peculiaris as its rallying point, who may successfully follow with local mea-ures the invading army as it files its forces down the straight and narrow defences, or deploys its legions along the devious pathways of the seminal sacs? Whichever way the eye of the anatomist turns as he studies these deeper parts, the territory presents but impregnable fortresses, where the enemy may intrench himself and live forever on the milk and honey of his adopted land. Nor is this a mere fancy picture. It is not as a rule in the bladder, the ureters, or even the kidneys that the surgeon need lose heart in doing battle with the disease. In these parts the open field, the ready means of access with curative agents, both local and general, encourage him to a successful issue; but once the disease is domiciled in the seminal appendages the outlook is indeed far from encouraging. At the risk of a digres-
sion let me say that, in my opinion, too much stress is laid on the part the prostate plays in deep, uncured urethritis, and that here more than anywhere else in these parts may we dare to use, with some reason for anticipating good results, the powerful silver drop. If more deep chronic claps were prostatic, more cures would be recorded. The other seminal appendages, and of these probably in chief the seminal vesicles, offer almost insuperable obstacles to medication of any sort, and I rather wonder that more is not said of pyo-seminalis as an analogue of pyosalpinx. A more general exercise of the autopsy test would, I am sure, bear out the truth of this idea.

Failing to cure by local measures, we have recourse to the various vaunted internal remedies, whose mode of action through blood and urine is not only of a diffused and roundabout character, but, as regards certainly a large number of the agents in common use, of questionable specific value.

When may one who has had a chronic posterior urethritis safely marry? This is a question too grave and too far-reaching for me to attempt to answer to-night. One authority has said, not as long as a single pus cell or flocculus can, after repeated examinations, be found in the urine, while another, equally eminent, recommends marriage as a cure for gleet. I leave this part of my subject for you to discuss.

A few words about uncured gonorrhea in the female. Ricord said that when old man Weller advised Sam to “beware of the vidders” he had in painful recollection the claps that in his younger days he had caught from that source. Be that as it may, who can surely say when a woman is cured of a clap, or what is perhaps of more importance, who can declare by any means at his command that a suspected woman is free of the disease? How commonly is gonorrhea contracted by some one from a subject who declares herself innocent of the disease, and points to a healthy vagina and frequent harmless congress with other men in proof of her claim. How often does the one-child mother with her history of pelvic phlegmon and her painful, fixed, and deflected womb demonstrate the invasion of the deeper organs by an old specific vaginitis through os and cervix made patulous by her parturition. Again and again have I expressed with a bivalve speculum through an apparently normal os into a pale, cool, dry vagina, a quantity of muco-purulent matter of specific character. Who then can tell of the possibilities of infection that lurk still further up in womb and appendages? It is not even necessary, as in the case of the male, to conjure up a relighting of anterior inflammation, a self-infection brought about by wine and the dance, for may not each menstruation serve as an agency to bring down the lurking virus for man’s infection? Here, more than in any other way, to my mind, is found explanation of the commonly recognized danger of infection by sexual congress during the molimen. Surely something more than menstrual blood and a crumbling but normal endometrium must be looked to for the cause of this not infrequent catastrophe. In conclusion let me say, as of the women even more than of the men, gonorrhea is fraught with decidedly more danger than is syphilis.

LOUISVILLE.

ANGINA PECTORIS; TUBERCULAR PNEUMONIA.

Delivered at New York Polyclinic.

BY PROF. R. C. M. PAGE.

At my last lecture, gentlemen, I began to speak of angina pectoris. The patient here has what is known as “tobacco heart,” one form of irregular rhythm. Tobacco acts directly on ganglia of heart.

There are three forms of angina pectoris: (1) A rhythmic, as occurs in this patient; (2) painful, generally occurring in men of middle age, and of the class pretty well to do in the world, high livers, tobacco and alcohol users.

It is nothing but a sclerosis of the nutrient vessels of the heart, producing anemia; the heart becomes paralyzed and stops beating the same as if the nutrient vessels had been ligated. Now, you don’t find sclerosis in young people, unless, mind you, they are syphilitic, and syphilis will produce it in any age provided patient has had it long enough. In this, lead-
poisoning and syphilis are similar. Gouty diathesis also predisposes to this form. Mr. Garret, of London, states that one third of cases of gout were due to lead-poisoning. (3) The third variety is pulmonary, asthma being a form.

In its treatment there must be necessarily two periods, paroxysmal and inter-paroxysmal.

If a patient has had an attack of angina once in any of its forms the chances are it will recur sooner or later.

Knowing something of its pathology (the small nutrient arteries of the heart), the rational treatment is to give a remedy to dilate these vessels, some one of the nitrites being the best, sodium nitrite, nitrite of amyl, or nitroglycerine. Patient should carry nitrite of amyl pears, to be used when an attack is felt to be coming on; breaking one on a handkerchief and inhaling from that, thus dilating the arteries and ending spasm. If, however, it is an old case, and the arteries ossified, amyl of course doesn't do as well as in simple sclerosis. Amyl, then, is the paroxysmal remedy. Never give chloroform, for it is a great heart depressant; nor would I with the heart in that condition dare to give ether. Next to the nitrate of amyl, if it can not be had, is the administration of sulphate of morphia hypodermically, beginning say with one-eighth grain or, preferably, five minim of Mejandee's solution, or more if you know your patient.

The old treatment, brandy, doesn't of course meet the indication, but it may do some good.

For the inter-paroxysmal treatment Huchard, of Paris, claims that the mortality has been greatly diminished since having found out what angina is. If it hasn't gone too far, he claims that he can cure it in two years, and I believe it can be done.

He unites the iodides and nitro-glycerine: if syphilis is suspected, the potassium iodide—if not, sodium iodide. I think potassium iodide is decidedly the best, especially here in New York.

His method of administration is as follows (Huchard):

Pulv. iod. sod. (or potass.)........ 3iv; 
Aqua........... ........................................ 59.
M. Ft. sol. Sig: One teaspoonful t. i. d.

If gout is suspected, to the above is added vin. coleh. sem. 5ss.

This mixture is taken for two weeks in doses as above, alternating at the end of that time with nitro-glycerine for two weeks.

The latter can be given in compressed-tablet form; but I prefer giving it in this form:

Glonolin, one-per-cent sol........... 5ss;
Aqua, q. s. ad.............. 59. M.
Sig: Teaspoonful, t. i. d.

This is to be kept up for two years, every two weeks alternating the two preparations. The patient may complain soon of heat about the face, constriction of the throat, and headache. As soon as these symptoms are complained of you know your are pushing the nitro-glycerine too far.

Huchard says, since he has been treating patients rationally in this way, the arteries will stay dilated and the mortality has been greatly reduced. But as to ossified arteries, I have never found any thing that will restore them; I wish I had.

The next patient, gentlemen, was perfectly well up to three weeks ago; since then he has been sick. Has been coughing, at night particularly; a chill since; feels cold at night. These chills are not as if they were malarial, but more like pyemia. We never could make a diagnosis from what he tells us, but by physical inspection may arrive at conclusions. By inspection, which is the first thing to do, we don't notice much the matter; he hasn't been sick long enough to be much emaciated.

Posteriorly, the left scapula we notice moves more than the right when he takes a deep breath. Pleurodynia and pleurisy both may limit movements on either side. Palpation gives us increase in fremitus on right side; but ought we not to have more here in health? By percussion we hear that there is dullness on the right side anteriorly, but, he being left-handed, the increase in muscular development would not account for that.

Auscultation gives râles on right side only on inspiration; they are too loud for crepitant râles; the question is, are they bronchial or intra-pleural? DaCosta says that it is absolutely impossible to distinguish the two signs by the character of the sounds. But as this patient tells us he spits considerably when he coughs, we can set aside intra-pleural râles even though they are localized.
I would say that this man had had a pneumonia, which instead of resulting in resolution has developed into a tubercular pneumonia. He doubtless had tubercular infection when his pneumonia developed.

I will say a few words on the treatment of some of the complications of phthisis while I am on this subject:

1. Hemorrhage from the lung may be an early sign, and unless heart disease, vicarious menstruation, wound, or injury is present, you can say it is due to phthisis in the first stage or a cavity is present. In a cavity the artery is not eaten through, so to speak, but is dilated, till finally this aneurism, for that is what it constitutes, bursts, and we have a hemorrhage. Such hemorrhages are more difficult to handle than those occurring in the first stage.

In Dr. Alonzo Clark’s time at Bellevue we used to run for salt and water and make the patients drink lots of that whenever they spilt up an ounce of blood, this constituting a hemorrhage. It was said that the salt drew the serum of the blood to it, and what was left coagulated more readily—a pretty roundabout theory. If you give enough of it they vomit and are disgusted, refusing to take any more.

I give a hypodermatic injection of ergotin, grs. iij, also sulphate of morphia, the latter keeping patient quiet, blunting sensibility of the part, and quieting irritation caused by trickling blood which makes them cough, and gives time for blood to clot. I don’t know how else it acts. Ergotine of course contracts blood-vessels. If these two fail, I don’t know what else to give.

2. Quinine may bring down temperature in hectic of pneumonia and phthisis a degree, but it is done better by antifebrine, grs. iij; antipyrin is still better, but it and phenacetin cause too much sweating.

3. For night-sweats, give tr. belladonna in cough mixture. I use it in dispensary practice; but in private practice, if it causes harseness, as it does sometimes, I use agarecin in one-eighth-grain doses three times a day, or, what is very beneficial sometimes, oxide of zinc, three grains at bedtime. It is one of the best; I have used it, and so has Williams, of London, with good results. Vitriol and arom. sulph. acid are nasty to take, and do little or no good.

Reviews and Bibliography.

Syphilis in Ancient and Prehistoric Times. By Dr. F. Buret, Paris, France. Translated from the French, with notes, by A. H. Ohmann-Dumesnil, M. D., Professor of Dermatology Syphilography in the St. Louis College of Physicians and Surgeons.


Ever since the prevalence of the great epidemic of syphilis in the close of the fifteenth century, the origin of the disease has been a debated question. Each nation of Europe proached the one to which it owed the greatest grudge with having originated the disease. Finally, weary of the war of words, they patched up a truce and by common consent agreed that the poor red man of America should accept this position of bad pre-eminence. The red man has never denied the justice of the charge, but among his accusers have every now and then sprung up certain of quickened conscience and enlightened judgment to trace the disease to a different source. With the history brought to light in this remarkable volume we think that work is done. The recorded facts collected here from the literature of all ages, and every land that has a literature, as well as the revelations of paleontology, conclusively prove that syphilis has existed from the remotest ages.

Aside from its bearing on the question of the origin of syphilis, the insight it gives to the moral history of the ancients and of a part of the middle ages is such as is nowhere else to be had in a condensed form, and is calculated to appal with the depth and extent of depravity it reveals. In the literature of Rome, Greece, Israel, and India, the author finds and adduces texts that by no fair construction, and often by not the most strained construction, can mean any thing but syphilis.

Along with certain collateral information that we are glad the author has been tempted to give, is the information that vaccination was as well understood by leading Hindoo physicians, probably three thousand years before Christ, as it is to-day among us. In a medical work called Sacket Grantham occurs this remarkable passage: “Take the liquid of the pustules of the cow’s teat, or from the arm of a human being,
between the shoulder and the elbow, place it upon the point of a lancet and introduce it in the arm at the same place, mixing the fluid with the blood, the fever of variola will be produced. The disease will be mild, as it is in the animal from which it is derived. The pustule is perfect when it is of good color, filled with a clear liquid, and surrounded by a red circle.

The translation must be spoken of only in the highest terms. Not only has the author succeeded in entirely eliminating the French idioms, but he has succeeded everywhere also in clothing the thought in the most appropriate idiomatic English. One who reads a page of this book will read the book.

A Clinical Text-Book of Medical Diagnosis for Physicians and Students, based on the most Recent Methods of Examination. By Oswald Vierordt. M. D., Professor of Medicine in the University of Heidelberg, etc. Authorized translation from the second improved and enlarged German edition, with additions. By Francis H. Sturart, A. M., M. D. With one hundred and seventy-eight illustrations, partly in colors. 700 pp. Price, cloth, $4; sheep, $5. Philadelphia: W. B. Saunders. 1891.

To prepare a perfect work on diagnosis it would be essential to take in review, first in a detailed and then in a comprehensive manner, all the bearings of normal and pathological anatomy and physiology. This would prove a herculean task, and the work of a lifetime might leave it still unfinished. It is the direction, however, which all progress must take. Another course, a far easier and more pleasant one, is to select a liberal number of the most common and distinctly marked diseases, and, making a group of the main symptoms of each, to differentiate them by comparison or exclusion. This method enables us to classify our information, and is an aid to memory of very great value and a decided stimulus to study. This is the method of Dacosta and the feature that has rendered his great work so popular and so profitable.

Our author has here pursued largely the first plan and given us a book unique in the way of exhaustive learning.

The method of making every class of examinations, the symptoms discovered, the signifi-

Consumption: How to Prevent it and How to Live with it. Its Nature, its Causes, its Prevention, and the Mode of Life, Climate, Exercise, Food, Clothing, Necessary for its Cure. By N. S. Davis, Jr., M. D., Professor of the Principals and Practice of Medicine, Chicago Medical College, etc. 143 pp. Price 75 cts, net. Philadelphia and London: F. A. Davis, Publisher. 1891.

This small volume, the author tells us, is an elaboration of a series of hygienic rules which he had prepared and has been accustomed to supply to his patients. It is a terse presentation of the most important points in the hygienic and climatic treatment of consumption, with a brief reference to the most frequent needs in the way of medical treatment. It embraces for the most part what is generally approved and what has been said again and again, but perhaps nowhere better said. While on the whole the work may be spoken of in unstinted commendation, there is yet a point here and there that may bear criticism. In speaking of localities in climates favorable to consumptives, Los Angeles is mentioned as being sheltered from the ocean winds. Our own recollection is that the elevations are scarcely perceptible that intervene between that city and the sea, which is reached over a gentle slope some twenty-eight miles across. Its elevation, however, is enough to enable it to escape a portion of the fogs that prevail at the coast.
We are told that if alcohol is added to a dish of food, that is being artificially digested by a chemist with gastric or pancreatic juice, it will retard that digestion in proportion to the amount added. In his monograph on Digestion and Diet, Sir William Roberts, after most careful experimentation, declares that he found no appreciable retardation when less than ten per cent of alcohol was used in artificial peptic digestion. Withal, however, Dr. Davis has given us a sound and very readable book, and one well adapted to the comprehension of non-professional readers.  

D. T. S.


The value of this work is not in the amount of original contributions to bacteriological knowledge on the part of the author, but in the judicious selection of material and the clear and comprehensive presentation of the subject. We have here not only the classification, life-history, appearances, etc., of the various microbes, but also their practical relations to surgical knowledge by a thorough master of the science. The book is valuable if it were only for the zest it gives to the study of bacteriology.

In regard to special points, the author holds it as proven that lupus is only a form of tuberculosis, while he believes the microbial origin of cancer entirely unsustained by any facts, and, besides, is against probability.

Recognizing in Dr. Senx a charming and instructive writer, as indeed every one does, we must find a little fault with his own underestimate of himself. The identity of Nicholas Senx is not likely to pass unrecognized even where his name is used without a single title. There seems little warrant then for his name on the title page to be followed by the names of fifteen or twenty societies to which he belongs, and to which anybody can belong, many of which demand no special acquirements and confer no distinction.

D. T. S.


This volume forms No. 22 of Saunders' Question Compendiums, and the publisher has again shown himself as fortunate in his editor as he ever has been in the attractive style of the make-up of his compendium. The author tells us that, finding Ganot too large to be used as a text-book, he resorted to the notes of Professor Chandler's lectures on physics, delivered at


Ability to judge of the age of domestic animals is a matter of greatly more importance to the farmer than the physician, though there are few men in any calling who do not now and then have occasion to decide especially as to the age of horses.

In this volume perhaps all that can be done in the present state of knowledge to afford the necessary information is here to be found. The work presents a careful study of all that has been written on the subject from the time of the earliest Italian writers, and embraces all that is most valuable in the veterinary authorities of all countries. The illustrations are especially full and good. The plates present a series of object lessons so clearly setting forth the appearances of the teeth of the various animals, especially the horse, that the text scarcely requires to be studied at all. It is a book that every one having to deal with horses should have, if for nothing more than the intrinsic interest it must impart to the handling of these animals. Of less advantage and less certainty are its contributions to the study of the ages of other animals, but none are without interest.
The College of Physicians of New York. We hardly know which to congratulate more, an institution that has such a teacher, or one that has a class capable of comprehending such lectures. Would to heaven there were more of both!

The student who is well versed in these pages will certainly prove qualified to comprehend with ease and pleasure the great majority of questions involving physical principles that he is likely to meet in his medical studies.

D. T. S.

Correspondence.

VIENNA LETTER.

Editors American Practitioner and News:

I wish to give you the short notes of a case, the autopsy of which occurred to day, and which is most interesting because of its rarity. The patient was in the wards of Prof. Kahler, where I had the opportunity of examining her.

The patient was a woman of some thirty-five years; slender, delicate in appearance, somewhat cyanotic; respiration rapid and labored. Physical examination showed heart normal in position, intact; apex of left lung infiltrated, dullness on percussion; moist rales, large and small, on auscultation; middle and lower portions of left lung unaffected. The right lung on percussion in front gave complete dullness of apex down to second rib; here the dullness gave place to tympanitic resonance which went unbroken into the abdominal resonance. No liver dullness was to be made out. Percussion over the right lung posteriorly gave apex dullness extending down to about same level as in front. Then came a zone of tympanitic resonance down to about the eighth rib, from which point to twelfth rib there was complete dullness. Auscultation over the right lung anteriorly gave no respiratory murmur, bronchial breathing, large and small moist rales, and gurgling rales, indicating presence of small cavity or cavities. From the second rib downward no respiratory murmur at all was to be heard, but only the transmitted rales from above and some gurgling sounds which were looked upon as transmitted intestinal gurglings. Posteriorly the same kinds of rales were heard over apex, losing themselves going downward; from eighth to twelfth rib no sounds were heard. The vocal fremitus was to be plainly felt in front over apex of right lung and as far down as second rib, where it became very much diminished suddenly, and further down more or less completely lost. There was evidently a cavity of some sort on right side below the second rib; the metallic sound obtained by auscultation with the stethoscope, and at the same time striking the pleximeter with the finger-nail, was most striking and beautiful. The phenomenon of succussion was also present. It is to be added that tubercle bacilli were present in the sputum. The patient stated that while walking a few days before in her room she had suddenly felt a sharp pain in her right chest, and immediately thereafter had great difficulty in getting her breath. The case seemed plain enough: the diagnosis of tuberculosis was made, with infiltration of both apices, small cavities in right apex, pyo-pneumothorax, and the accompanying pleuritis; the patient was so denominated, and the case was supposed to be thoroughly understood. There was only one point which remained unexplained, and that was the fact that the right thorax half, which was slightly bulged out in its lower part, showed quite as much or even more respiratory movement than the left. This was a circumstance remarked upon and left unexplained as paradoxical. It is to be further remarked that a partial ankylosis of the right shoulder joint had been noticed, and that the right upper extremity was smaller than the left by four centimeters; this shortening was in the arm, the forearm being as long as its fellow of the opposite side. One more circumstance before we go to the autopsy: The liver dullness on the right side was missing, as I have already stated, while on the left side the left lobe was to be made out in its usual location and dimensions.

The patient died, as interesting and considerate patients in public hospitals should do, and the autopsy was made this morning. I had the good fortune to see it. After opening the abdomen the pathologist, Dr. Paltäuf, inserted his hand to ascertain the position of the dia-
phragm, expecting it to be pushed down, as the clinical diagnosis was pyo-pneumothorax. To his surprise his hand kept going further and further upward on the right side, and finally was brought to a stand by the diaphragm at the level of the second rib. Consternation and excitement among the staff of the clinic Kahler! Further examination disclosed the fact that the ascending and transverse colon filled out the space where the pyo-pneumothorax should have been. The right lobe of the liver was pressed by the colon against the posterior abdominal wall, while the left lobe presented toward the anterior in about its normal position, slightly enlarged; between the two lobes was a wide, deep groove marking the position of the colon. This peculiar position of the liver, the right lobe back, the left lobe front, gave that organ a sort of half-spiral shape.

The left lung was found infiltrated at the apex; middle and lower portions unaffected; heart in normal position and unchanged. The right lung, confined to the small space above the second rib, was found adherent to thoracic wall, of course very greatly shrunken in volume, solidified, with a number of small cavities in the apex. In the pleuritic cavity was found a moderate amount of cloudy serum. Examination of the diaphragm disclosed that, while the left half was normal in appearance, the right half was entirely lacking in muscular fibers, and appeared only a thin fibrous membrane. Attention was then directed to the smaller upper extremity, the humerus of which was found to be, as already stated, four centimeters shorter than the corresponding one; the middle portion of the deltoid muscle was entirely absent. Next the phrenic nerve was dissected out and found to be much smaller on the right side than on the left. The spinal cord was then removed; the third cervical nerve root on the right side was found to be much smaller than the corresponding one on the left. The conclusion drawn was that the patient had suffered in childhood from an anterior poliomyelitis, which had resulted chiefly in a destruction of the ganglion cells on the right side of that portion of the cord where the phrenic nerve has its origin, namely, the region of the third and fourth cervical nerves. This accounted for the lack of muscular fibers in the diaphragm, and for the smallness of the right humerus and absence of the central portion of the deltoid. The paradoxical symptom of the respiratory movement of the right thorax not being at all diminished was now accounted for satisfactorily. The respiratory muscles, with the exception of the diaphragm, had remained intact and continued to perform their function; little by little the fibrous diaphragm was stretched and forced upward into the thorax, overcoming the elasticity of the lung and compressing it in the upper portion of the thoracic cavity. The colon followed the diaphragm, being forced over the liver, and the right lobe of the liver being pushed in this way against the posterior abdominal wall. Every time the patient breathed the right half of the thorax was distended, not with air, but with intestinal gas in the colon. The dulness from the eighth to the twelfth rib posteriorly was caused chiefly by the right lobe of the liver.

This is the second case of the kind which has been recorded in the pathological institute here; the dried preparation of the other one was brought down and exhibited by Prof. Kundrath. The position of the diaphragm was just the same, reaching to the level of the second rib, only it was on the left side. Prof. Kundrath is very happy in having now a pair of them.

A tale is going the rounds here now which illustrates how the great men sometimes trip up, and which can serve the purpose of making the little fellows more cautious but at the same time of giving them courage. I have it directly from the lips of Prof. Kundrath, the chef of the pathological institute, and there is no question that the story is entirely true. There came one day a patient to Prof. Nothnagel. This patient had a very large area of dulness over the upper abdominal and lower thoracic regions of both sides. He also gave a history of having had a dog with whom he had associated a great deal. The case was very plain to Prof. Nothnagel as echinocoeus, and he lectured on it at great length for an hour before his class of students. Having served this
good purpose the patient was sent to Billroth's clinic for operation. A laparotomy was performed, but, wonder of wonders! the liver was all right. only perhaps a trifle smaller than usual. The spleen was also without fault, and it then became apparent that the trouble was in the thoracic instead of in the abdominal cavity. The abdomen was closed up—and the patient died a few days afterward. The pathologist, the terrible, cruel pathologist, demonstrated a pericarditis with effusion!

JAMES B. BULLITT, M. D.
Vienna, February 1, 1892.

Abstracts and Selections.

The Treatment of Abortion.—It is not my intention to present here a résumé of the literature of this subject, but rather to give my personal views upon it, which, while they will comprise little that is original, will, I hope, be of sufficient interest to elicit a discussion that will be valuable.

The treatment of abortion includes its prevention, when this is possible. Whether or not prevention is possible is the first question to be decided in practice, and it is not always an easy one. The amount of hemorrhage, the severity and duration of the pain, and the degree of dilatation of the cervix are the elements to be taken into consideration in forming an opinion. If any of these symptoms are well marked it is not safe to promise its arrest, and if all are present the final expulsion of the ovum may be confidently predicted. But, unless the hemorrhage is profuse or dilatation quite noticeable, an earnest effort should be made to stop the process. The indication is to secure rest—rest of the body, rest of the mind, rest of the nervous system. This is secured by placing the patient in bed, in a cool room, and at once bringing her under the influence of an opiate. This can be done most rapidly and surely by a hypodermic injection of morphine, and the effect may be continued by opium, by the mouth or rectum, combined, if the patient be nervous, with chloral or bromide. When examining, the physician should ascertain if there be retroversion or flexion, and, if so, correct it at once by placing the patient in the genu-pectoral position and raising the body of the uterus with two fingers in the vagina. This maneuver, according to Lusk, is often sufficient in itself to arrest the abortion. The patient should, of course, not be allowed to lie on her back or assume an upright position for a number of days.

Viburnum prunifolium is strongly recommended as a prophylactic by Jenks and others, and E. S. McKee reports a quite remarkable case where abortion was apparently twice prevented by the use of dioviburnin, of which probably the most active ingredients are viburnum and dioecoria villosa. I have never used either of these remedies, believing that opium accomplishes all that can be expected from drugs. The opium should be continued till the symptoms subside, or progress so far as to render abortion inevitable. If the symptoms subside the patient should be kept in bed for several days before being allowed to gradually resume her habits of life, and should return to it upon the recurrence of the slightest symptom, and at the time when she would menstruate were she not pregnant.

When the abortion is recognized as being inevitable, the method of procedure depends on the condition of the cervix and the amount of hemorrhage. If the cervix be dilated and the hemorrhage severe, the ovum should be detached and delivered at once. If the cervix is not dilated and the hemorrhage trifling, as it usually is if the sac has not ruptured, an expectant course is doubtless the best one, though the patient must not be left long at a time by her attendant, as the sac may at any moment rupture and the hemorrhage become alarming. When the hemorrhage is profuse and the cervix not sufficiently dilated to allow of an immediate delivery, the vagina should be thoroughly tamponed. This controls the hemorrhage and at the same time usually stimulates uterine contractions. The vagina is best tamponed by packing it tightly with small, firm balls of absorbent cotton previously immersed in an antiseptic solution. With the aid of Sims' speculum the cervix is first carefully surrounded with small balls, then a second layer covers it, and upon this are packed balls of a larger size until the vagina is filled. To insure dilatation of the cervix while the tampon is in place, a roll of iodoform gauze may be crowded into the cervical canal with dressing forceps and sound before packing the vagina. If a Sims' speculum is not at hand, one can tampon the vagina satisfactorily by using two fingers as a retractor of the perineum, and in a case of emergency strips of old muslin may be used instead of the cotton. The tampon may be left undisturbed for from six to twelve hours, and it frequently happens that upon its removal the ovum will be found in the vagina. If, on the contrary, the ovum still remains undetached, the hemorrhage continues, and the cervix is not yet dilated sufficiently to allow delivery, the vagina must be tamponed again after having been douche with a warm antiseptic.
solution. The cotton may be left again for six hours. When it is removed, if the cervix is still not sufficiently dilated—which will rarely happen, I believe, if the cervical canal has been well filled with gauze—it can be replaced by still a third, which can remain the same length of time; but when it is removed it is better to make persistent efforts at dilatation with the finger, and, failing with that, to resort to Goodell’s dilator, than to again fill the vagina with cotton, for prolonged and repeated tamponing is not without danger. I believe it is better practice to dilate with an instrument than with a tent, as most text-books recommend. It is more aseptic and more rapid. The hemorrhage that takes place while dilatation is being effected is not profuse enough to be alarming in so short a time. Luck, Parvin, and others recommend the administration of ergot while the vagina is tamponed. I doubt the wisdom of this advice and never follow it. It is admitted that ergot acts most powerfully on the lower portions of the uterus, and thus imprisons rather than expels its contents. But they claim that the tampon effectually prevents this. Just how the tampon, as usually employed, does this I am unable to see. It certainly causes dilatation mainly by reflexly stimulating the uterus to contract; and do these contractions prevent ergot from exercising its predilection for the lower segment? Is not the reason that this effect of ergot is less manifest when it is administered during abortion than when administered during labor at term, that the uterus responds less actively to ergot during the earlier months of pregnancy than during the latter? Uterine contractions induced by ergot are always of a constant, unremittent character that is not conducive to the detachment of the ovum in its entirety. The exceptions to the rule, Give ergot only when the uterus is empty, are few indeed.

Before the fourth month every effort should be made to secure the expulsion of the ovum entire; for if the sac ruptures and the fetus escapes, portions of chorion are almost sure to remain behind. When this occurs, shall the remains be removed at once, or shall they be left until septic symptoms arise or nature manages to expel them? I am a firm believer in the practice so ardently and persistently championed by Mundé, of removing them at once. In no other condition is it more true than in sepsis that prophylaxis is the best treatment. Why we should be advised to wait until symptoms of sepsis appear before an effort is made to prevent it, is something I can not understand. Aside from the danger of sepsis, I think no one will deny that retained portions of the placenta seriously delay involution and predispose the uterine mucous membrane to chronic inflammation (fungoid endometritis). Then why, if it can be safely done, should not the uterus be thoroughly cleansed at once? I believe it can be done with perfect safety, providing it is done aseptically with an ordinary degree of skill. I believe that the dread of interfering in these cases arises principally from two causes. The first is that many ob-tetricians do not yet take sufficient care to render their fingers and instruments aseptic. The second is the high mortality of criminal abortion. When we reflect that in criminal abortion the uterus is invaded in the most violent and unskilful manner with instruments which are far from being surgically clean, and the membranes are ruptured at the beginning, and these cases are afterward sadly mismanaged or neglected, we see that they make no basis on which we can form an opinion as to the danger of introducing instruments into the aborting uterus.

If the patient is not fleshy, and has lax abdominal walls which admit of the uterus being so depressed by a hand on the abdomen that its cavity can be thoroughly explored with the index finger, this is the best of all instruments for removing the fragments, and is the one that should be used. In a large proportion of cases the condition of affairs is such that it is necessary to employ some other instrument, and a number have been invented for the purpose. The first time I had occasion to use such an instrument I very naturally employed the one recommended by Dr. Reamy, and it acted then, and has in a number of cases in which I have since used it, so satisfactorily that I have never cared to experiment with another. This instrument closely resembles the ordinary stone forceps minus its teeth. The method of using it is as follows: The patient is brought with her hips to the edge of the bed, and her legs are flexed and held by the nurse. A Sims’ speculum is introduced, and the anterior lip of the cervix is seized with a tenaculum forceps. The placenta forceps is introduced closed into the uterine cavity, the blades slightly open, and their edges placed against the uterine wall and closed. If the operator feels that something has been grasped, he withdraws the forceps and removes the fragments from its jaws. This he repeats until satisfied that no remnants are left in the cavity.

The three points of merit in this instrument are its simplicity, safety, and efficiency. Its simplicity is self-evident; with ordinary care no one will injure the uterus with it; I believe that one trial will convince any one of its efficiency. When the uterus has been emptied it should be washed out with a warm solution of creolin, which I regard as the most satisfactory and re-
liable non-toxic antiseptic for the obstetrician's use. This is most conveniently done by simply straightening the cervical canal by gentle traction on the anterior lip with the tenaculum forceps. No tube or Bozeman catheter is needed to secure the ready outflow of the fluid.

The after-treatment should be the same as though the woman had been delivered at full term. She should remain in bed two weeks; and to stimulate the uterus in its work of involution, which it often appears loath to begin when called upon to do so before it has reached the limit of its physiological hypertrophy, quinine and ergot may be given.—Dr. C. L. Bonifield, American Journal of Obstetrics.

**Albuminuria and Life Insurance.**—At a recent meeting of the Hunterian Society of London there was a discussion of the relations of albuminuria to life insurance. The Medical Press and Circular for December 9th contains an abstract of the debate. Dr. Hingston Fox opened the proceedings with a paper, which was commented upon by Dr. Pavy, Sir William Roberts, Mr. Clement Lucas, and others. Dr. Fox based his paper on his notes of the uranalysis in the cases of 282 applicants for life policies—all of whom were males except two.

Albumen was found in thirty per cent. of the cases. This percentage depended on the fineness of the tests employed; conglutination by boiling was chiefly relied upon. The albuminuria of organic renal mischief was found in only eight cases out of the 86 of albuminous urine. Of another type, called "permanent albuminorrhea," there were two cases; in one of these albumen was known to have been present at least two years, with apparently no disturbance of the health, while in a second case it was said that albumen had been observed from time to time during a period of seventeen years. The risk in such cases may be accepted under specially arranged terms, if the age is under forty, provided the diagnosis is clearly made out. Under the head of albuminuria from "loaded urine" the proportion of cases was very high, numbering 22 in 86. This might be called an albuminuria of "city life," or "civic albuminuria." Oxalate of carbon and uric acid are not infrequent in these cases, and glycosuria is more rarely an attendant symptom. This disorder is, as a rule, amenable to treatment, and if it passes away the applicant should not be rejected. Of cardiac albuminuria the ratio was as high as 20 in 86. The risk in these cases is to be judged apart from the uranalysis. Dr. Fox includes under this heading, to which he gives the name of "albuminuria of unstable circulation," both the functional and "cyclic" forms of this affection.

Dr. Pavy, who has been officially employed with insurance questions for many years, stated that he was a firm believer in the existence of a functional albuminuria which did not lead up to structural disease. Many cases of cyclic albuminuria were dependent upon the position of the body, and were not improperly styled "postural," the early morning excretion being usually free from albumen, which appeared in the middle of the day and was gone again at bedtime. An alteration in the mode of life will affect the amount of excreted albumen. Dr. Pavy is in the habit of requiring four specimens of urine—one passed at the rising hour, one at noon, one at 6 p.m., and the fourth at bedtime. If the patients are in bed during the day, the character of the urine is changed. As has been shown by Dr. Hingston Fox, these persons are known by their mobile disposition, quick pulse, and irritable heart, with a sharp, "smacking" impulse. The albuminuric condition may continue long and then gradually wear away. It is bad practice to keep such patients in bed. These applicants are not to be accepted or rejected on the results of a first examination; they require investigation. Dr. Pavy instanced the case of a young collegian who studied his own condition to some profit. When a youth, aged eighteen, he was a good athlete and passed a civil-service examination, but subsequently, albumen having been found in his urine, it caused his rejection. The case was cyclic, and he was afterward passed. He then went to Oxford, and from there went up for a final physical examination before going out to India. During this time he had read up the literature of these cyclic cases, and when the examination approached he remained in bed until just before the time, with the result that he was accepted, as there was then a temporary cessation of the albuminuria. Regarding the albuminuria that is associated with glycosuria, Dr. Pavy stated that the prognosis was usually favorable if the glyco-uria was amenable to treatment; it did not lead on to Bright's disease, as had been taught by some of our recognized authorities.

Sir William Roberts defended the use of the term "physiological albuminuria." The time had gone by when the pre-ence of albumen in the urine could be regarded as equivalent to a death-warrant. This condition might follow shock or strain, the passage of gravel, or the ingestion of a heavy meal. A child might run a race and come backflushed with a thumping heart—symptoms that came within a physiological range; so, too, sharp exercise would cause a temporary albuminuria, which was not, in his opinion, outside of the physiological range. The same was true after the ap-
application of cold baths. In regard to the risks of these physiological groups of cases, and others that were only occasional and transient, there was no longer any occasion to pronounce a sinister prognosis, but the diagnosis must be definitely made out for the protection of the insurance companies. If the applicant was in early life, the prognosis was of course more favorable than in persons who had passed their fourth decade.

Mr. Clement Lucas referred to cases where there seemed to be a family predisposition to show albumen in the urine on slight provocation. Thee belonged to a non-hazardous class of insured, if properly treated. He had found albuminuria in men who, being about to be married, had applied for insurance, and the excitement incidental to these undertakings appeared to have the power to cause the disorder; in one such case, that of a man of thirty-four years, this symptom has caused the company to reject the application; after his marriage his urine was found to be entirely free from albumen, and he was to all appearances an eligible risk. Another instance of protracted ineligibility from this same cause is related by Dr. Sewill in the above named journal. The patient is living to-day in his seventy-seventh year, although twenty-six years ago he had been shown to be markedly albuminuric by the late Dr. Sibson, of St. Mary's Hospital. The albumen was present in large quantity, and the cause of the attack was thought to be an undue indulgence in sea-bathing in chilly weather. The case was regarded as serious, and a careful regimen was prescribed. The patient, however, was so careful to medical opinion and did not follow directions implicitly. He had a good family history, and had always been healthy, strong, indolent, and a large flesh-eater, besides taking alcohol in moderate amount. In the course of four or five temporary illnesses in twenty years albuminuria has been several times found, but the general health had not been seriously threatened until three years before, when an ascites and an abdominal abscess made their appearance. It was thought impossible that the man could recover, but he did. He is now hearty, and scoffs at regimen and the wisdom of the faculty. Nearly all the physicians who at various times gave an unfavorable prognosis regarding the state of his kidneys are already under the soil. Assuming for the moment that this man was a rejected applicant for insurance, we can readily understand that an injury was done both to him and to the insuring corporation in consequence of the true value of his urinary symptoms having been misrated.

In conclusion, we can not do better than quote the following editorial opinion from the November issue of the Canada Lancet: "In placing an albuminuria in its proper place as regards etiology, and in coming to a conclusion as to its probable effect upon the patient's future, the physician must take a wide survey of all the attending circumstances, and keep the patient for some time under close observation lest a serious error be made as to prognosis and treatment. There can be no doubt that hundreds of quite healthy persons are annually rejected by insurance companies because of transient and functional albuminuria, thereby entailing much worry and loss, not only upon the unsuccessful applicants, but also upon their families and friends." A greater amount of labor, care, and responsibility must be entailed upon the medical examiners in order to arrive at the true significance of urinary signs; but the same is true of every department of medicine that is not standing still.—New York Medical Journal.

Otorrhoea and Its Consequences.—The first case was a boy, thirteen years of age, an inmate of the Washington City Orphan Asylum, a brunette of slight and rather delicate figure.

History. It seems that this child, before entrance into this asylum, had had scarlet fever very severely, followed by otorrhoea, for which he had been treated. He had also been attended for chorea. But, after admission, what treatment he had received from the physicians of the institution had been for trivial disorders, easily relieved, no record of which had been kept.

Symptoms Preceding and During Last Illness. On the 15th of October, 1888, his teacher, having been struck by his listlessness and general unlikeness to his normal self, called the attention of the acting superintendent to him. He was promptly removed to the infirmary of the institution and placed under the care of an experienced nurse, that his diet and habits might be duly regulated. At this time he complained of headache (more or less frontal), was more irritable than usual, capricious in appetite, and once or twice vomited his food. The approach of typhoid fever was feared, and he was watched and tended with exceptional care. . . . On Monday, the 22d, he seemed entirely well until about noon, when a fit of irritability seized him. He complained of his food, demanded ham and cabbage, and was only pacified by the promise—not, of course, to be kept—that he should have it the next day. I paid a visit to the house that afternoon and examined him, was annoyed to find his temperature 101.5°, and ordered full doses of quinu and potassium bromide. Next day he seemed entirely him-
self until 4 o'clock, when he became violent and soon fell into a stupor, in which condition I found him an hour or two later. At this time he was unconscious, motionless, his pupils neither contracted nor dilated, nor deviating as to axis, the one from the other. Pulse full and compressible, about 68 to the minute. No unusual heat of the head exteriorly. . . . Saw him next morning with Dr. Lachlan Tyler, my associate in the institution. We found him less unconscious, perhaps, judging by ocular expression, but still unable to speak, or even protrude his tongue when told to do so. Pulse 76, temperature 100.8°; pupils slightly contracted, probably from opium. Had taken his nourishment at regular intervals from a tablespoon, but with difficulty. Next morning iodide of potassium substituted for bromides; purgative dose (calomel, sodium, bicarbonate, and ipecac) ordered; hot mustard baths for feet. Purgation was free, with the aid of an enema; but from this time until Saturday morning, the 27th, he gradually grew worse, temperature and pulse rising, respiration becoming shallower and more frequent until death at 10 a.m.

Autopsy by Dr. Lachlan Tyler, 3 p.m., Drs. Hagner, Honstoun, and myself being present. The brain and meninges were found to be in a state of intense congestion, the gray matter infiltrated and darkened, here and there dots of extravasation, and in the subarachnoid space (especially posteriorly) an accumulation of serosanguinous fluid, with clouding (almost to opacity) of the membrane itself as the base of the brain was approached. The thorax was then opened, but nothing abnormal detected except hypostatic infiltrations of the dependent portions of the lungs. The liver appeared to be the seat of no structural change. The glands of Peyer in the neighborhood of the ileo-cecal valve were reddened, elevated, and surrounded by arborescent congestion of the adjacent mucous membrane. Spleen and mesenteric glands were not examined (by reason of urgent demands upon the time of all of us).

The second case is that of J. T., aged ten, an inmate of Washington City Orphan Asylum. Father intemperate. Mother died of phthisis.

History. About Saturday, the 14th of June last, he presented symptoms of listlessness, hanguor, etc., and was removed from the school room to the infirmary. His teacher had noticed deafness for some time, but made no report of it. His condition was so little alarming that I was not called to him until the 18th (Wednesday). At that time his tongue was furred, face much flushed, and he complained of occipital headache, constipation, and of pain referred to back of arms. Ordered mercurial cathartic with hyoscyamus and ipecac, mustard foot-bath, counter-irritation, and finally vesication of nape of neck (treatment was merely symptomatic throughout).

On the 20th (Friday) he complained of much pain, referred to region of spleen, for which iodine ointment was used. Later the lower spine was attacked; for this veratrine ointment was employed. An antiseptic wash was used for mouth and ears, as a slight odor was perceptible; and Dr. William Holland Wilmer was called in to examine ears and eyes. He found in the right drumhead two perforations, one in membra flavicida, the other in membrane vibrans, below the manubrium. From the latter was projecting a head of pus. Foul odor to the discharge. The eyes were carefully examined. "There was no choked disc, but the nerve was a little redder than normal and the veins a trifle larger. The pupils were dilated (the left somewhat more than the right), and were sluggish."

From this time on there was no improvement, but a steady advance of all bad symptoms, with stupor, restlessness, and even violence. Death occurred on Tuesday morning, the 24th.

Autopsy by Dr. E. M. Schaefler, June 24, 1890, 3 p.m. Rigor mortis partial (temperature of room very high, body not on ice). Nutrition poor. Left pupil more dilated than right. Much post-mortem discoloration. About two ounces of clear serum in cavity of pericardium. Strong adhesions of right lung. Right lung: upper lobe congested, no deposit; middle lobe, purulent infiltration, and substance nearly hepatised in places. Left lung congested; no adhesions. Heart: some dark fluid blood and serum, solid clots in right ventricle, left ventricle nearly empty. Liver: some aboral firmness and adherent to diaphragm. Stomach, intestines, and kidneys normal. Brain: much congestion of dura and pia mater; vesicles at vertex in pia mater much engorged; turbid serum at base of brain and in cerebrospinal cavities. Brain very large. Tegmen tympani imperforate but discolored. Medulla abnormally large; examination of section of same by Dr. Schaefler showed "two or three irregular spots in the interior of the medulla, apparently produced by the extravasation of blood into the nerve bundles; numerous congested capillaries were seen in one portion of the section." Cause of death, meningitis.

I desire to call attention to the lack of similarity in symptoms of these two cases, yet I am compelled to conclude, from light now afforded, that death in both cases was due to the otorrhoea. In the last-mentioned case there was no opening from middle ear to base of brain;
yet the condition of that organ warrants the belief that its abnormal appearance was due to suppuration of middle ear. How did it reach the cerebrum? It will be observed from the report of Dr. Wilmot that he found two perforations; therefore they were spontaneous. The drumhead resisted the pressure of products of suppuration until its maximum resistance had been reached by pressure and erosion; but, before this end had been reached, the cerebrum was invaded by one or more of three possible courses—as, through the sheath of the "acousticus," or the "facialis" to the meninges; through the dura mater; or by irrigation of pus into the aqueduct of Fallopius—as the following authorities will explain:

"The course of acute purulent inflammation of the middle ear may therefore be said to tend to a greater or less destructive process in the mucous lining of the cavity of the tympanum, and to rupture of the membrana tympani. The latter event is usually the first destructive result of the disease, and is very likely to give relief to pain. In some of the more violent cases pain may not only continue but increase after the rupture of the membrane. In such cases a well-grounded suspicion may be aroused that the disease has invaded parts deeper than the mucous lining of the drum cavity, and that it is likely that either the mastoid cells or the cranial cavity, or both, may have become affected."

"Darolles has given an account of acute otitis media purulenta of the right side followed by facial paralysis on the tenth day; acute meningitis was caused in this case by irruption of the pus into the aqueduct of Fallopius. On the sixteenth day profuse sweating, involuntary discharges of urine and feces, paralysis of the left arm, dilated pupils, reacting sluggishly, thready pulse, temperature 40.6° C., were noted. Death occurred the same evening. Post-mortem examination revealed veins of the pia and dura mater greatly congested; copious purulent infiltration into the subarachnoid cellular tissue, confined chiefly to the base and the convexity of right hemisphere; on the left side, only those portions of the brain overlying the sphenoid bone were involved. Small isolated purulent foci were found along the blood vessels of the convexity of the brain. The pia mater adhered at several points to the gray substance."

"Dr. Gähde has related a case of death resulting from an acute purulent inflammation of the middle ear. The patient was a young soldier under Dr. Gähde's observation in Magdeburg, Germany. The acute symptoms occurred on the 27th of August, but appeared to subside after a slight discharge had occurred from the affected ear—the right. By the 12th of September, however, the discharge from the ear and the pain having in the mean time subsided, the patient complained once more of pain in the ear, and his mastoid portion was found to be very sensitive to pressure. Notwithstanding rest in bed and free leeching behind the affected ear, cerebral symptoms set in, and on the second day the man died. The post-mortem examination revealed that the pus had accumulated in the tympanic cavity in large amount, but instead of bursting through the membrana tympani a second time, and thus saving the life of the patient, it had forced its way into the mastoid cavity and thence through a defective spot in its posterior wall, until the products of inflammation were brought in contact with the dura mater. This, of course, set up an irritation in the covering of the brain, and fatal meningitis soon followed."

"Kretschy publishes three cases of fatal purulent inflammation of the middle ear. . . . In the second case the autopsy showed at various spots an infiltration, partly serous and partly purulent, of the inner membranes of the brain, as well as on the convexity of the cerebrum, at the edge of the left cerebellar hemisphere, and at the lower convolution. The left membrana tympani was destroyed, with but little pus in the tympanum. The author assumes that the sheath of the acousticius or facialis had transmitted the inflammation to the meninges."

The vagaries of pus originating in and seeking exit from the middle ear are curious and various enough. Besides the modes and avenues of eruption which have been already described, are those associated with the condition known as mastoid periostitis—a condition characterized by Pomeroy as "the simplest and most frequent form of mastoid disease ordinarily met with in practice." Unfortunately the case of my own to which I shall now refer, presents an aggravated phase of the disorder. The patient, a gentleman of culture and refinement, but with evident (hereditary) strumous diathesis, was sent to me some years ago by a physician in a small town not very far from us. The doctor could not operate on him, as he was treating a severe case of erysipelas, but promised that I would, and would give him a cure in two or three days. (He had been under his care for about six months.)

There was a cavity under one temporal muscle, containing about an ounce of pus, the bur-
rowed of which was checked in upward and backward direction by the attachments of the muscle. An incision was promptly made, the sac drained, and compressed sponges snugly bandaged on and then wetted to insure even pressure. Tonic treatment was employed, fever and other symptoms met as they arose, and for a time improvement was marked and a good result looked for. Finally, however, an accumulation of pus was detected about the mastoid attachment of the sterno-cleido muscle, and Dr. Ford Thompson was consulted. He advised and made, under ether, three large incisions, so as to secure complete through-and-through drainage with daily irrigation; and after some time the sac seemed obliterated.

All this while discharges from the external ear would occur from time to time, and whenever they would cease the sac would give compensatory exit to the accumulations. When the drum membrane was perforated, the "whistle" was distinctly audible, so that no ocular proof of rupture was needed. He was finally made to practice this exercise. Of course the ear itself was carefully treated with antiseptic solutions, boracic acid dry, etc.

After the cavity was closed and Dr. Thompson had retired from the case, I detected another sac over the middle of the occipital bone, just above the ridge. This I incised in the most dependent part and drained with a tube. After a tedious process the patient made a good recovery, and is, I believe, at one of our hotels at this time. Dr. Lachlan Tyler, of this city, and Dr. Chisholm, of Baltimore, were my advisers in the case before Dr. Thompson was called in.

Pomeroy details at length a case precisely similar to this, and describes the "mode of invasion" as "outward from the tympanum along the periosteal lining of the osseous meatus until the covering of the mastoid is reached."

My conclusion is, that in all cases of children in whom deafness is observed (not before noticed and accounted for), especially in such as present a history of exanthematos disease or of pharyngeal or nasal catarrh, as well as in those cases which offer more positive evidences of acute suppurative inflammation, it should be our duty, as it certainly shall be my practice after this dearly bought experience, to exhaust all means of examination and diagnosis in order to ascertain if there be indication for early paracentesis of the membrana tympani, and, if such exist, to have the operation done at once; or, if the specialist's skill be not available, to do it for yourself—for I remember the teaching of Dr. C. R. Agnew on this point: That while not every man could be said to be capable of doing the operation, it could safely be affirmed that any one sufficiently in possession of his faculties to insert his hatchet key into the lock to which it belonged was fully competent to perform it, especially in an emergency.

Dr. G. B. Harrison, Amer. Jour. Obst. tries.

Case of Puerperal Peritonitis Treated by Amputation of the Uterus: Recovery. I was called late on the night of the 9th of October, 1891, to see Mrs. O., who had just been delivered by a midwife, but who was in an alarming state of exhaustion. She was thirty-five years of age, the mother of one other child, and had had very long and painful labors each time. I found her almost pulseless, unable to speak, and deathly pale. I gave her some brandy and water and a dram of fluid extract of ergot, and at the end of an hour she had rallied sufficiently to allow the midwife to set about the removal of the placenta. This she was unable to accomplish. I also tried, first by squeezing on the fundus and drawing on the cord, and, when that failed, by introducing my hand into the vagina and grasping the placenta with my fingers. It was quite firmly attached, and the patient complained very bitterly of the pain which every attempt at its removal caused her. If she could have stood an anesthetic, I would have given her one and introduced my hand, with proper precautions, into the uterus, so as to detach it; but by this time the patient had become so weak again that I feared she might die then and there. I therefore decided to adopt the procedure recommended by Wincel and practiced at the Munich clinic, viz., to wait twelve hours, and, if the placenta was not spontaneously expelled by that time, to administer an anesthetic and detach it with my hand. I left an ounce of ergot, with directions to give her a teaspoonful every four hours, for the double purpose of preventing hemorrhage and expelling the after-birth. I gave her a hot vaginal injection of plain water, and cleaned her up, removing all soiled linen from her and her bed. I told the midwife to allow her to rest, so as to gain a little strength for what I had to do when I returned. As soon as I left the house, however, the midwife set to work at the placenta, and by 3 A.M. she had removed what she thought was the whole of it, and which she showed me in the chamber when I returned before 9 A.M. I did not think that it was all there, and consequently introduced my hand into the vagina and with great difficulty removed several handfuls more from the uterus, which was still tightly closed. The patient was too weak to stand an anesthetic, and the introduction of my hand caused her intense pain, so that I could not get my fingers up to the fundus. I then gave her an intra-uterine
douche of permanganate solution until it returned clear, and these injections were repeated twice a day. She rallied very well for the next thirty-six hours, but about forty hours after delivery had a chill followed by a temperature of 104°. About forty eight hours after delivery I was suddenly called to her, and found her with her knees drawn up, abdomen distended, face pale and anxious, pulse thready and 140; she was crying with pain all over the abdomen. I at once gave her a good dose of Rochelle salt, applied turpentine stupes to the abdomen, and in an hour she was quite free from pain. I felt sure that I had a case of peritonitis on hand, but to what was it due? If to a suppuring appendix or a ruptured pus tube, it was plainly my duty to open the abdomen and remove it; if to a septic uterus, to clean it out with the curette. I inclined toward one of the former causes, on account of the patient having had a high fever and intense pain in the right iliac region for five days before the confinement; while if it were due to a septic uterus it must have been infected some days before her delivery, puerperal peritonitis not generally coming on before six to nine days after delivery.

The next question for me to decide was: Should I first curette the uterus or explore the abdomen?

I remembered my experience in a former case, which I lost, and in which curetting had seemed to render the patient much worse, apparently having opened fresh avenues for the admission of germs into the system. On the other hand, what would be the use of curetting if an abscess had broken into the peritoneal cavity? If the patient could stand the two operations, it would be better to curette first, and, if this was not followed by improvement, to perform an exploratory abdominal section.

Next morning, the 15th, she was much worse, so I placed the matter fairly before the patient and her family, and gave them until 3 P.M. to decide whether I should open the abdomen and remove whatever I found to be the cause of the trouble. At 3 P.M. I returned with Dr. Bruere, who also considered the patient's condition critical, and received permission to do whatever I thought best to save the patient's life. I then sent for Dr. Springle, who ably assisted me, under great difficulties, to perform the operation, while Dr. Bruere undertook the very anxious task of administering the anesthetic. An hour was spent in finding a clergyman and administering the rites of the church, and it was not until a quarter past 4 that the anesthetic was begun, and about 4.30 the incision was made. It was a very dark, rainy day, the light was very poor, the room cramped, and the last sutures had to be inserted by the aid of the feeble light of a coal-oil lamp. Fortunately the distension had been somewhat relieved by the Rochelle salt administered the night before and repeated that morning, so that the intestines gave us only slight trouble. We first inspected the peritoneum and found it free from lymph or pus, though the intestines were somewhat injected. We then sought for an inflamed appendix, with negative results. The uterus and its appendages were very congested, but the latter contained no abscess; neither were there any adhesions anywhere.

I now felt certain that the seat of the trouble was in the uterus, and during the next sixty seconds I had to decide whether I would sew her up and leave her to her fate, or whether I would give her a chance for her life by removing the septic organ. I decided upon the latter course, and lifting out the fundus with a volsella, and placing the wire of Koeberle's serrenud around the uterus about the level of the internal os, taking care to exclude the bladder and intestines and to include the appendages, we tightened up the wire and placed two pins through the uterus above it. Dr. Springle made a few cuts in the uterus, and, as they bled, I tightened the wire several times until all bleeding was controlled, when I removed the uterus, leaving a stump about the size of a small apple. We then poured two gallons of hot water into the peritoneal cavity, padded it about for a few moments, and then siphoned it out. The peritoneum was then dried and the stump drawn down to the lower angle of the wound, which latter was then brought together with silk-worm-gut sutures placed close together, and which I passed from within outward by the sense of touch, as I could not see. I did not sew the stump peritoneum to the parietal peritoneum, believing, as I do, that adhesions take place within a short time by simple contact. The stump was not cauterized, but simply buried in boric acid and covered with boric acid gauze. No drainage-tube was used. The operation consumed less than an hour, and the patient was returned to bed no worse than before the operation. I left orders to relieve pain, if it should come on, by the same means as before, namely, turpentine stupes and salines. Oozing came on soon after, but was easily arrested by a few turns of the screw, which I instructed the attendants how to use. She had only one attack of pain, occurring about daybreak the next morning, which was relieved as before, in a few minutes, and she has been free from pain ever since. There was a slight tendency to vomiting next day, for which I ordered a grain of calomel every hour until the bowels were moved, which
they were toward night. The serre-need had to be tightened every six hours, until on the third day the end of the screw was reached and I was obliged to substitute a longer instrument, known as Smith's, armed with a stout linen cord which had been disinfected by boiling. As this has happened in every case of hystereotomy, I shall in future discard Koeberle's constrictor and use Smith's altogether. This was tightened regularly night and morning until the fourteenth day, when the stump came away. The bowels were moved every day with one-grain doses of calomel combined with teaspoonful doses of Rochelle salt, repeated every hour for two or three and sometimes four hours. On one occasion they had to be repeated six or eight times before they moved, the result being a mild salivation which required a mouth-wash of chlorate of potash. For the first week I gave a grain of quinine and a grain of digitalis three times a day, as the pulse was so weak and fast, but after that it improved so much that I left it off. The temperature, which had been 103° before the operation, fell to 103° next day, to 101° the day after, and on the fourth day reached normal, where it has remained ever since. About the end of the first week she began to have a troublesome cough, for which I gave her the compound syrup of codeine of the French Pharmacopeia. This is an elegant preparation and proved very effective. As I have read of a good many cases in which death followed laparotomy owing to bursting open of the wound from coughing, vomiting, etc., I have not removed the stitches yet, although it is more than three weeks since the operation, and I shall leave them for another week, as they are causing no trouble. The patient has a good appetite, eating steaks and chops twice a day, and she is beginning to sit up in bed. She will be out of bed at the end of the fourth week. The hole where the stump was measures to day one inch in diameter and one inch in width, and is rapidly filling up. Owing to the unpleasant odor from the stump, I tried several times to cut some of it away, but it bled every time until the twelfth day, when it suddenly turned black. No narcotics were given from beginning to end of treatment, and to this I attribute her freedom from pain.

One of the most valuable lessons Mr. Tait has taught us is that pain after abdominal section is nearly always due to flatulence, and that the administration of morphia only increases this. The breasts were very full, but quickly dried up under injunctions of iodide of lead ointment. She was able to pass her water herself from the very first day. Her baby is thriving well on the bottle. A neighbor and a young sister, who knew nothing whatever about nursing, made excellent nurses, doing neither more nor less than I told them to do. They both remarked this morning that the patient was looking very much better now than she did before her confinement.

On examining the uterus twenty-four hours after removal, it was found to contain remains of placenta which were so firmly adherent that they would break sooner than peel off. The inside of the uterus appeared of a dark purple color, while a semi-purulent liquid could be squeezed out of the sinuses. The walls of the uterus were soft and friable. From the gratifying result in this case under the most unfavorable circumstances, I feel confident that this method of treating apparently hopeless cases of puerperal septicemia has a good future before it, but on the one condition that it be not delayed until the woman is actually dying. Some may say that this was a very radical treatment, but I maintain that it was fully justified by the condition and the disease, which is one of the most fatal. In England and Wales alone there died from puerperal septicemia, in spite of every other treatment, no less than 1,087 women last year, so that a great many thousands must have died throughout the world. Would these women not have gladly sacrificed their wombs, if they could thereby have saved their lives? Abdominal section for puerperal septicemia has hitherto had a bad record in Montreal, as elsewhere. The reason seems very clear to me, viz., that it is of little use to open the abdomen and wash out, and then to sew up the woman without having removed the whole cause of the trouble. Namely, the septic uterus, whose walls are saturated with infection, and which no amount of curetting or washing could possibly disinfect. If, when no other cause is found, the removal of the uterus be added to the exploratory incision, I believe the operation will nearly always be followed by success.

Others may object that this woman, although alive and well, has been mutilated. But, perhaps the very ones who will say this, have themselves mutilated by the removal of the appendages, many women who were in no danger of their life, but merely suffering from menstrual pain. The operation which I performed is actually a safer one than simple removal of the normal ovaries, for I did not leave in the abdomen either the cut ends of arteries to furnish secondary and concealed hemorrhage, nor ligatures to give rise to abscesses. My cut vessels and ligatures were all outside of the peritoneal cavity where they could do no harm, being seen and under constant supervision and control. As for the prospects afterward, I can say

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**The American Practitioner and News.**

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The text is a detailed account of a patient's recovery after abdominal section, emphasizing the importance of prompt treatment and the efficacy of the method described. The author contrasts the result with the high mortality rate from puerperal septicemia in other places. He concludes with optimism about the prospects for future cases treated with similar care and caution.
that two of my patients with fibroids who have had their uterus and appendages removed by abdominal section are now in good health, such as they never enjoyed before or since puberty. As for this poor woman, she abhorred and dreaded pregnancy. She is poor, and the two children she has are as many as she can care for. She will now be able to perform her duties to her husband without the dread with which she has fulfilled them heretofore.

From my very limited experience I would draw the following conclusions:

1. The temperature should be taken every day after every confinement, and on the slightest rise vaginal douches of permanganate solution should be commenced.

2. If the temperature continues to rise, the douches should be made intra uterine.

3. If there is no improvement at the end of twenty-four hours, scrape out the uteri with the finger or with the curette, apply strong tincture of iodine, wash out the uterus, and drain with iodoform gauze.

4. If the case proceeds from bad to worse, and peritonitis sets in, perform an exploratory incision, and, if no other evident cause can be found, remove the uteri.—Dr. A. Lapthorn Smith, American Journal of Obstetrics.

THE USE OF HYDRASTIS CANADENSIS IN OBSTETRICS (Nouv. Arch. d' Obst. et de Gyn., August, 1891).—Metrorrhagia during pregnancy and labor is the most frequent and often the most serious obstetrical complication, and has led to a real abuse in the use of ergot, which, in the hands of practitioners who do not reason as to the contra-indications of the drug, becomes a source of danger to both patient and child.

Tetany of the uterus and ergotism of the fetus are conditions which have been recognized by authorities such as Doléris, Tibone, Cuzzi, Schröder, Barnes, Tarnier, Braun, Morisani, and others, and need no further demonstration. Ergot should not be used so long as the fetus or the placenta is in the uterus.

Tamponade of the vagina is not always practicable. It is therefore of the utmost importance that some therapeutic agent be found which will have a hemostatic action upon the uterus without exciting it to contract—a drug which can be administered with impunity during pregnancy or labor.

The fluid extract of hydrastis canadensis, according to Dr. Bossi, seems to meet this need. From the reports of its use during the past two years in the Gynecological and Obstetrical Institute of Genoa, it is found that it was given in sixty-four cases of pregnancy and labor. A careful research was made as to the following conditions: (1) The constitution and state of health of the patient. (2) The time of administration and amount given during pregnancy, labor, and the puerperal period. (3) The date of pregnancy at which labor occurred. (4) Existing complications at the time of its administration. (5) The results obtained. It was found that it was given in nineteen cases during pregnancy for the relief of sacro-lumbar pains and the prevention of threatened metrorrhagia; for hemorrhage from various causes; for placenta previa with threatened abortion. From one hundred to two hundred drops a day were administered in divided doses. The results were excellent; the hemorrhages ceased both in the cases which went on to term and in the smaller number in which abortion could not be prevented. There were no ill effects, and no uterine contractions followed.

Hydrastis was administered to fifty patients during labor, usually in the first stage, for placenta previa, hydramnios, uterine inertia, and tedious labor, and to avert post-partum hemorrhage. The amount given was the same as above, in fifty-drop doses.

Dr. Bossi considers the stage of dilatation the most favorable for its administration. Some little time is required for its action; if taken during the first stage, it will take effect during expulsion; if given immediately after expulsion, it will act during the delivery of the placenta and afterward. In conclusion, he sums up as follows:

1. There is no danger to either mother or child attendant upon the use of hydrastis canadensis.

2. Its action is hemostatic, whether used as a prophylactic or for its immediate effect, and there is no ecbolic influence exerted upon the uterine muscle.

3. Its value as a therapeutic agent in obstetrics is superior to that of ergot, since it accomplishes the same results without exposing the patient to the same dangers.

The fluid extract may be used:

(a) In the hemorrhages which occur during pregnancy and the puerperal state, in the amount of from one hundred to one hundred and fifty drops a day, in three divided doses.

(b) In hemorrhage, during labor, in about four doses of fifty drops each.

(c) As a prophylactic against post-partum hemorrhage, and in cases of hydramnios, uterine inertia, and excessive development of the fetus; in profound anemia, and where previous labors have shown that there exists a tendency to hemorrhage.

SUPPURATIVE OÖPHORITIS.—Dr. H. J. Boldt, before the New York Academy of Medicine, in his opening remarks, referred to the common
occurrence of the suppurative processes in the pelvis which were usually referred to the fallopian tube. But that form of inflammation called suppurative oöphoritis, leading to a partial or a total destruction of one or both ovaries, is not quite so common. Obviously this process in most instances arose from contact of the ovary with a focus of supputation in its immediate vicinity, the broad ligament. Often at autopsy we found no difference in the appearance or consistence of the remnants of the ovary and the adjacent considerably thickened pseudo-membranous material of the broad ligament. Here it was necessary to resort to the microscope in order to determine how much of the original ovarian structure was left, the main guides then being the tortuous arteries of the medullary portion of the ovary as well as the remnants of the menstrual follicles. He said he had come into possession by operation of some specimens showing a marked degree of supputation of the ovarian tissues, which he proposed to describe, especially for the reason that the manner in which inflammation and supputation could be established in these organs had not yet been subjected to microscopic tests.

Dr. Boldt then described the changes which had taken place in the various tissues which had composed the organ. He said that from his description it would seem that he differed from the views of many pathologists, who held that inflammation and supputation were due to nothing but an emigration of colorless blood corpuscles or leucocytes from the capillaries and small veins. He had satisfied himself that the main mass of inflammatory tissue was furnished by a previous fibrous connective tissue, often a liquefaction of its basic substance. As long as the newly formed inflammatory corpuscles remained interconnected the original character of the tissue, although unquestionably greatly altered, still remained. It was only after breaking asunder of the inflammatory corpuscles that the tissue became entirely destroyed, the corpuscles previously termed inflammatory now becoming pus corpuscles.

The final result of the inflammation of the myxomatous tissue was identical with that of fibrous connective tissue. It was transformed into a mass of inflammatory corpuscles, with a complete disappearance of the follicular wall and a final breaking up into pus corpuscles.

Regarding the smooth muscular tissue, it was impossible to study the inflammatory changes of this structure in the cortex, since it was so intimately mixed with fibrous connective tissue. The result of the inflammation was so similar in both varieties that the source of the inflammatory corpuscles could not be readily traced. The middle coat of the arteries, however, afforded an excellent opportunity to study the myositis.

In the process of supputation the tissues filling the centers of the arteries broke up into inflammatory corpuscles the same as did the muscle coat, and all vessels perished by being first transformed into inflammatory corpuscles and afterward disintegrated into pus corpuscles.

Two pronounced epithelial formations were concerned in oöphoritis, namely, the Graafian follicles and the surface epithelium of the ovary. In one of his specimens the follicular wall appeared to be broken up into spindle-shaped bodies and inflammatory corpuscles, which undoubtedly had their origin from fibrous connective tissue. The shining epithelium of the follicle had become enlarged and irregularly shaped, their nuclei had assumed a homogeneous, glassy appearance, and their number appeared augmented four to six times, evidently in consequence of their division. The protoplasm of the epithelium was coarsely granular, and in some places there were distinct marks of division, splitting up the protoplasm into pieces of various sizes by means of delicate thorny projections. It seemed plain enough that the lining epithelium of a Graafian follicle broke up into a small corpuscle, as did also the surrounding fibrous connective tissue. The surface epithelium of the ovary was found lining the abscess cavity in one of his cases. Here he could trace the row of the columnar epithelia from comparatively insignificant inflammatory changes up to their destruction into pus corpuscles. The most conspicuous change of the epithelium was their transformation into so-called mother cells.

True ovarian abscess of non-puerperal origin is very rare. If the histories of the cases published are carefully considered, it will be seen that they are subsequent to a puerperium—including abortion and miscarriage as well as delivery at full term—or that they are not ovarian abscess at all, but are tubo-ovarian abscess or suppurating ovarian cysts or tumors. It is evident from the anatomy of the ovary that a true ovarian abscess cannot attain a large size. It is very exceptional for it to attain a size larger than an English walnut; very rarely does it get larger than a hen's egg. No case can be called an ovarian abscess with certainty until anatomically proven to be so.

The prominent symptoms of the cases of chronic ovarian abscess are pain in the ovarian region, which may radiate to the hypogastric and sacral regions. It is a dull pain, sometimes sharp and lancinating. It differs from
the pain in salpingitis in not being modified by menstruation. Reflex nervous symptoms are sometimes present, such as headache, gastric disturbances, etc. Physical examination shows a condition similar to an oophoritis and peri-oophoritis and perimetritis. This chronic suppulsive ovaritis may extend over a long period of time. When an acute process is implanted upon this chronic one a change takes place; the patient has slight chillls at irregular intervals, the pain is increased and localized more in the ovary, which increases in size, fluctuation being more or less prominent. The temperature rises and the pulse becomes more rapid.

The treatment varies. Chronic suppulsive oophoritis may be treated locally for some time on account of the inability to make a clear diagnosis of the condition; but when, though the patient may be temporarily relieved of her pain, the physical signs do not improve, abdominal section should be resorted to and the suppuring organ removed.

If the case be subacute or acute, the abscess, if it have thin walls so that there is danger of rupture during enucleation, should invariably be aspirated before an attempt is made to remove it, on account of the extreme virulence of the pus in the majority of such cases. It is of course understood that in this class of cases the diagnosis can always be made that there is a pathological condition present which requires an abdominal section.

Where the abscess is unusually large it is so adherent to intestines and pelvis that enucleation without tearing the walls is out of the question. When it is also adherent to the floor of the pelvis it should be opened per vaginam, and drained and treated like an ordinary pelvic abscess. This can be readily done, because, having the abdomen open, we can guide our instrument, with which we perforate, without trouble.

The prognosis, if the peritoneal cavity can be kept free from pus, is favorable.—American Journal of Obstetrics.

The Acarus Sacchari.—The sugar insect is of interest to the physician, as it may possibly be that the large numbers found in raw sugar would make it injurious to the health of the consumer, and, moreover, there is a skin disease produced by handling unrefined sugar. The Acarus sacchari is an insect belonging to the order Acarida (Medical News, November 7, 1891). Dr. Hassall was the first to call attention to the general occurrence of the parasite in raw sugar sold in London. According to Professor Cameron they were found in a living state in no fewer than sixty-nine out of seventy-two samples. He did not detect them in a single specimen of refined sugar. In an inferior sample of raw sugar he reports finding five hundred of the organisms in ten grains of sugar. The acarus may be avoided by using only refined sugar, but even if they were eaten it is doubtful whether they would do any harm.

The disease known as grocers' itch, however, is undoubtedly due to the presence of this mite, which works its way under the skin and produces symptoms identical with those produced by the common Acarus scabiei, and the remedies are the same for both. It is important to remember that grocers and handlers of sugar are liable to such a disease. Raw sugar is probably not sold in large cities at the present day, so that "psora" is a rare disease among grocers, but is found more commonly among refiners and handlers of raw sugar. These parasites multiply very rapidly, and Gerlach has computed that a single female would produce one million five hundred thousand progeny in three months. A microscopic examination of minute particles of scab shows them to be swarming with the old and young acari. Various parasiticides are employed to destroy them, the most common of which are mercuric chloride and sulphur. Three species of acari are found on sheep, and the "scab" is one of the most dreaded diseases of this domestic animal. Other species are found parasitic on the cat, dog, and swine. Horses, cattle, and birds are also infested, and quite a number of genera and species of these insects are known. A case is reported of a child playing in the leaves in a wood, who on returning home complained of pain in her arm. No attention was paid to it until the next day, when a raised tumor was noticed, a small portion protruding through the skin, apparently like a splinter of wood. The child was taken to a medical man, who, after considerable pain to the child and trouble to himself, extracted a species of Leides nearly one fourth of an inch long, of an oval form and brown mahogany color, with a metallic spot like silver bronze centrally situated on the dorsal region. If the parasite had not been removed, dangerous results would probably have followed, although this species can hardly be classified as one of the human parasites.—London Lancet.

Lysol, a New Antiseptic.—Since October, 1890, I have used lysol as a disinfectant in all cases of emergency or operation, and the excellent results obtained are worthy, I believe, of publication.

Lysol is obtained by dissolving in fat and saponifying with the aid of alcohol the fraction of tar oil which boils between 190° and
200° C. It is a brown, oily-looking, clear liquid, with a feebly-creosote-like odor. It contains fifty per cent of cresols. It forms clear mixtures at once, in every proportion and at all temperatures, with water. It possesses the properties of a saponaceous solution in addition to its germicidal power. While as valuable as bichloride of mercury, it is without any toxic property—a point to be considered when it is used in cavities, and especially in gynecology and obstetrics. In the latter, and especially in emergency cases, lysol is of the highest value.

The greatest safety for the patient can only be obtained by cleanliness. The want of this in most houses and families can only be rectified by the employment of a thoroughly reliable antiseptic drug. I can say of my experience with lysol in more than two hundred cases that it has given me perfect satisfaction.

In the preparation of material for ligature and suture, I boil the silk (which is the only material used by me), wound on glass spoons, for three hours in a five-per-cent solution of lysol, so as to be ready shortly before the fixed hour of the operation. For emergency cases I boil the silk in the same way, then put it in two-per-cent lysol-alcohol till needed. These methods are quick, simple, safe, reliable, and therefore, as I am convinced, the best ones.

The instruments—after being assured that the nickel-plating is perfect—are washed with a brush in hot pearline water, then washed with a brush in a five-per-cent solution of lysol (hot), and after that put in a hot one-half per-cent solution ready for use.

The hands and forearms of the operator and of his assistants must first be rubbed with pure lysol and then washed with a brush in a one-per-cent hot solution. Just before operating the hands are to be dipped again in a basin containing a one third-per-cent lysol solution. In this solution the hands and instruments are always dipped if soiled in any way during the operation. This last low percentage prevents the slipperiness against which so many argue.

The field of operation is to be prepared by washing it with a five-per-cent lysol solution.

In concluding this description of the use and manipulation of lysol for operations, I will add that I employ only five-per-cent lysol gauze, which I also use in small pieces instead of sponges. The gauze is prepared by boiling for three hours in a five-per-cent solution of lysol and then drying in an oven.

For emergency cases, as in obstetrics, I have used, with the most satisfactory results, pure cotton dipped for about twenty minutes in a hot two-per-cent solution of lysol, out of which I wring it as needed.

I was first convinced of the highly antiseptic property of this drug by its striking deodorizing power, which I first noticed in my office practice. The horrid smell of a putrid vaginal discharge, caused by an inoperable carcinoma cervicis, ceased after an irrigation of thirty minutes with a one half-per-cent solution. This settled the question of the traits of lysol. I used the drug more and more till in time the above systematic manipulation was instituted.

Finally, I have to remark that at no time could an irritation of the tissues be proved. The patient, if sensitive, may feel a slight burning sensation for about ten minutes after the use of a one half to two per-cent solution.—Dr. E. Vondergoltz, American Jour. of Obstetrics.

Chromic Acid in the Treatment of Cysts.

Within the last few months I have treated with chromic acid three cases of ranula and seven of cystic goitre with such satisfactory results that I venture to make them known.

The three cases of ranula occurred in two males and one female. The former had received previous treatment without any benefit; the latter had not sought advice before. All three had large cysts, and the mode of treatment followed was the same in each. A portion of the cyst was cut away and the contents washed out. A saturated solution of chromic acid was then freely applied with a chromic-acid carrier to several points of the cyst wall. At the end of the week, the cavity having been much diminished, the acid was again applied, and in from a fortnight to three weeks the wound had healed and all signs of the tumor had disappeared. There were no bad symptoms.

The seven cases of cystic goitre were in females. The tumors were tapped in the usual manner and the contents washed out. After all hemorrhage had ceased, the saturated chromic acid solution was applied with a carrier through the cannula to the walls of the cyst in the same manner as with the ranulas. Six of the seven cases healed rapidly after from two to three applications, but the seventh and second of the series resisted for a long time all attempts, and it was not until three months had passed and some half a dozen applications had been made that the tumor disappeared. But neither in this nor in any of the other cases was there a bad symptom, and I attribute the length of time the last mentioned case took to heal to the fact that there was a considerable amount of hemorrhage oozing, which to a certain extent neutralized the action of the acid. It is therefore advisable to see that hemorrhage is as much as possible arrested before applying the acid.
I can not too strongly recommend this mode of treatment (first suggested by Dr. Woakes in The Lancet about two years ago), and though the evidence I have been able to offer is not very great—ten cases in all—still the persistent favorable results obtained are, I think, strongly in favor of a good trial being given to it, not only in the same class of cases as those I have quoted, but in every case of cyst that it is unadvisable or impossible to remove in cystic goitres it seems entirely to do away with the most dangerous part of the ordinary treatment, viz., the conversion of the cyst into a large abscess.—W. R. H. Stewart, in London Lancet.

Placenta Previa: Cesarean Section; Absolute Indication.—November 2, 1891, I was called to see Mrs. H. N., American, thirty-two years of age, Vpara, well developed and nourished. She was having short labor pains at intervals of ten to twelve minutes, and informed me that she thought herself at full term, or near it, but had no positive means of knowing, as she had flowed some each month excepting during August. As results of her four previous pregnancies, the first three children were still-born and the fourth lived only eight months. Digital examination revealed a hard cervix, apparently not at all shortened, without any dilatation of the os. No presenting part of fetus could be made out through the uterine walls, but pressure against the uterus gave a soft, doughy feel. I informed her that she was not more than six or seven months pregnant, and that rest in bed, together with what I would prescribe, would probably cause pains to cease. I gave one quarter grain morphine hypodermically, and left.

On November 3d pains were about the same as on previous day, with physical conditions unchanged. Said she had rested fairly well during the night. On November 4th and 5th no changes were apparent. On the 6th I was sent for in haste, and on arriving at the house found she had had a considerable hemorrhage, the flowing commencing with a rush, as she expressed it, but cea-ing before my arrival. Digital examination found the same conditions as heretofore, and, although the os would not admit a finger, placenta previa was diagnosed from the history and existing conditions. Although the abdominal walls were quite thick, I was able to find the fetus in transverse position, head to the right.

From this time until the morning of November 8th I watched the patient closely, a small amount of blood coming at intervals, when she was chloroformed, with the intention of dilating the os and making immediate deliv-

ery. Even under the anaesthetic I could not introduce a finger through the cervix, the resistance being greatest at the internal os. By the aid of steel dilators I opened the os enough to introduce a rubber dilator, which was attached to Allen’s surgical pump, and made effort to dilate by hydrostatic pressure; but resistance was so great that the os was opened only enough to allow the introduction of two fingers. I found a central implantation of the placenta, which was detached around the os, an edge reached on right side, liberated and turned back and to the left, and efforts made to reach a leg of fetus, but in this I also failed. Efforts were then made to change the position of fetus by conjoined manipulation, and failed. I then ruptured the membranes and tamponed vagina.

At three o’clock a.m., November 9th, pains were severe and two to three minutes apart. Removed the tampon and found condition unchanged from day previous, except that the os would not now admit two fingers. The patient was weak and nervous, pulse 118, and temperature 102° F. I advised cesarean section, which was accepted by patient and husband, though I offered but the slightest hopes for recovery because of the patient’s condition, her surroundings (being in a boarding house), and a suspicion, approaching a diagnosis, that the exceedingly resistant condition of the neck was due to carcinoma.

Assisted by Drs. Power, Allen, and Heine, I commenced operation at 10:50 a.m., November 9th, making an abdominal incision in median line eight inches in length and through uterine of about five inches; seized feet and extracted a fetus of about seven months, evidently dead two or three days; easily removed placenta, which was attached to the back and left lower segment of uterus, when the organ contracted firmly. Put in uterus seven deep and seven superficial sutures, five in peritoneum, and nine deep and nine superficial in abdominal walls, tying the last suture at 11:25 a.m., thus completing the operation in thirty-five minutes. When she was placed in bed, ten minutes later, her pulse was 170 and weak, and temperature 101° F., but she quickly rallied under stimulants and warmth.

At six o’clock p.m. pulse was 84 and strong, and temperature 99°. She asked for and received some nourishment, and expressed herself as feeling well, excepting after-pains, which were severe and about ten minutes apart. Gave one quarter grain morphine hypodermically, and left, thinking she might recover, but she died at 11:15 p.m.

All sutures used were of silk; disinfection of persons of patient, operator, and assistants
was closely looked to; and in the technique of the operation the suggestions offered by Dr. Howard A. Kelly in the May, 1891, number of this Journal were closely followed. Had I made efforts at delivery per vies naturales immediately upon diagnosing placenta previa, and, failing then, at once made the section, it is probable the patient's chances for life would have been better.—Dr. J. M. Sligh, American Journal of Obstetrics.

Suicide from Rat Poison.—The following case is interesting on account of the comparative infrequency with which this poison (phosphorus) is swallowed from suicidal motives:

Ann M., aged thirty-five, on Saturday, November 7th, while under the influence of alcohol, purchased from a chemist a small jar of rat poison, the contents of which she swallowed in spoonsfuls. Within half an hour she was seized with severe sickness and pain in the epigastrium. On the following day, as she seemed to be in severe pain, the husband wished to send for a medical man, but his wife would not consent to see one.

I saw her for the first time on Tuesday, November 10th. She seemed very depressed, complained of pain in the abdomen, especially in the epigastrium, and was suffering from jaundice. She had a mitral systolic murmur, and the heart sounds were feeble. Her liver was enlarged and tender, and her tongue furred. She gave me the following history:

For some years she had been subject to epileptic fits, and on Wednesday, November 4th, had had eleven distinct fits. Since then she had been getting worse, but did not send for advice sooner, as she had suffered from similar attacks previously.

Nothing was said regarding her having taken poison, and after her death I found that she had never suffered from jaundice. I diagnosed jaundice, due probably to gall-stones or to an irritating taken as food. Hot fomentations were ordered to be applied to the abdomen, milk diet to be taken, and podophyllin and taraxacum with dilute nitro-hydrochloric acid given. She died on the following day, having lived four days and a half from the date of taking the poison.

No post-mortem examination being ordered by the coroner, I received permission to make a partial one. The body was well developed. On opening the abdomen there was a distinct garlic-like odor. The heart was fatty, and cavities empty. Posterior surfaces of lungs edematous, and petechiae scattered over these surfaces. The stomach was filled with a dark brownish fluid having the smell of lucifer matches. The mucous membrane of the cardiac end was of normal appearance, but that of the pyloric end was deeply injected and of a deep crimson color. The transition in color between the two halves of the stomach was sudden. No ulceration present; no peritonitis. Intestines empty and normal in appearance, except at the upper end of the duodenum. The liver was enlarged, fatty, and very friable; uterus fatty, and membrane similar in color to that of the pyloric end of the stomach. The bladder contained urine; the kidneys were slightly fatty.

The above is another instance of the case with which one can obtain the most dangerous poisons for the purpose of taking away life, and though the deceased was in a state of semi-intoxication when she purchased the poison she had no difficulty in obtaining it.—Dr. D. Movat, in London Lancet.

Cerebro-spinal Sclerosis and the Acute Specific Fevers.—In an article in the Correspondenz-Blatt für Schweizer Ärzte, of which an abstract appears in a recent number of the Centralblatt für Klinische Medizin, Dr. Nolda directs attention to the occurrence of cerebro-spinal sclerosis in children and the relation which it bears to acute infectious disease. The disease as it appears in children does not differ materially from that in adults, except that symptoms come on more quickly and that it runs a more rapid course. Out of seven cases to which he refers, in six the onset of the condition was preceded by an acute infectious disease, and in five of them the first symptoms had manifested themselves so soon after the acute illness that it is reasonable to conclude that they depended upon it. In the sixth case the onset of the symptoms of sclerosis was not evident until several months after the acute illness. In only one case of the seven did the onset of the condition seem to be quite independent of an acute specific disease. The disease to which the sclerosis seemed to be in some close way related was in three cases diphtheria, in two cases scarlet fever, and in one case pneumonia. The author believes from these data that cerebro-spinal sclerosis in children is an after-effect in most cases of an acute specific fever, and from the fact that it occurs among the children of the poor he is inclined to think that it is closely connected with a want of care during convalescence. Although he has not seen an instance of the disease following influenza in a child, it is, he says, to be feared that the reason for this is not that the disease has no such sequelae, but that sufficient time has not yet elapsed for the various symptoms to have developed sufficiently to be recognized as manifestations of this disease.—Ibid.
CHECKING VICE AMONG THE COLORED.

The attention of the country has been drawn to the subject of morality among the colored by a recently published statement of Judge Thompson, of the Louisville City Court, that at least forty per cent of the adult colored population of Louisville are living together without having been legally married. As a result of this open lasciviousness, or at least as a concomitant of it, the number of depraved and incorrigible girls has become so great as to become a real menace to the morals of the city. As a partial corrective of this state of things, Judge Thompson, in connection with some other philanthropic citizens, has set on foot a project for having provided a reformatory for wayward negro girls.

Judging from the tone of the speeches at both the colored and white meetings in connection with this matter, and from evidence patent to every one, this depravity is something startling, and alarming as well, when considered in regard to the influence that it may ultimately have on the morals of the white and the better part of the colored population.

Immorality among the colored is no longer a thing apart, as it was in times of slavery. Then white girls seldom felt the influence of the immorality of the colored women, but many of them now must breathe the same moral atmosphere, especially in the cities. In the interests of the whites, then, as well as that of the blacks, a reformatory for colored girls is needed; it is also needed in the maintenance of good order. But we may well ask ourselves how far any provisions of the kind will go in the way of reformating the morals of colored girls.

Among a large majority of the colored people a man does not at all lose caste by having been in the penitentiary, and a colored girl is not likely to have sufficient dread of a reformatory to influence her in her conduct. As a punishment it will not succeed. Taken, then, in the most charitable view, what effect will it have on the only class for whom it can be employed?

Take these girls from the street, already depraved, condemn them or promote them to a reformatory, and how long can they stay? They must leave in the full vigor of womanhood. Then where will they go? No colored family can take them, and no white family will take them on any such terms as will shield them in the least from temptation. Sooner or later they will go to the bad in spite of all that society can be induced to do for them.

The character of labor that alone the great majority of the negroes can do, or are likely to get to do, will not enable them to lodge well. Their condition is such that they will be more and more stored in rookeries where privacy is driven away with decency. The proprieties of social police can be met by having a reformatory where depraved colored girls may be sent for a while instead of to the work-house; but the great number of such that are found in every southern city, and all the attendant circumstances, declare but too plainly that there remains but the sad ordeal of the survival of the fittest.

It appears, from reports from England and the Continent, that the public across the water are having considerable puzzle in placing Mrs. Annie Abbott, "The Little Georgia Wonder." We can assure them that Mrs. Abbott's feats will bear the closest investigation and the severest scrutiny they can be subjected to. The Practitioner and News has had that matter thoroughly looked into, and readily vouches for the phenomena as genuine.
Notes and Queries.

Too Many Needless Mutilations—Not Enough Conservative Gynecology.—(A. Doléri, Nouv. Arch. d'Obst. et de Gyn., July and August, 1891.) This is an age in which unscrupulous and unreasoning operative boldness, more or less helped out by antiseptics, too often takes the place of true surgical knowledge. Hysterectomy and laparatomy are undertaken apparently for the sole purpose of increasing the physician's list of operations performed; only the immediate result is taken into account, while those who stop to ask whether less radical measures would afford the desired relief are few indeed in number. Doléri protests vigorously against this condition of things. Vaginal hysterectomy, he says, is being zealously advocated by many simply because, when the operation is completed, no traces of it remain. Others maintain that by its means painful phenomena are abolished which conservative treatment fails to cure and which often persist after laparotomy. While this may sometimes be the case, he does not believe that it is always true. As to the effects of conservative treatment, he intends shortly to publish a report of about three hundred cases of chronic metritis (a third of which were complicated by unilateral or bilateral inflammation of the appendages), which will demonstrate the fact that a course of careful treatment directed to and overcoming the metritis usually subdues the attendant chronic inflammatory troubles and causes a total disappearance of pain. This result may not always be immediate, but, as a rule, it is sure to follow later, and meanwhile there is decided amelioration in the symptoms. There are, of course, some exceptional cases in which an operation is a necessity, and some hysterical and neuroptic patients who are not benefited by any treatment. In these latter cases, after operation, the pain is often only displaced, not abolished. Often a coccyodynia, or intense pain in the neck of the bladder or in the abdominal cicatrix, supervenes, and is about as unbearable as the original pain.

In the report of hysterectomies the whole truth is unfortunately not always told. One operator has claimed that the patient obliged him to operate. After palpation and a prolonged internal examination, the diagnosis was still utterly beclouded. He performed hysterectomy, and removed uterus, tubes, and ovaries, all in a perfect condition of health. Could the patient have forced him to throw her out of the window?

We all know the story of the surgeon who was on the point of operating upon an anesthetized patient, when, finding that he was about to remove a perfectly healthy organ, he discovered that the wrong patient had been brought to him. This might happen in the case of hysterectomy; the brilliant operation ended, restitution of the stolen organs would be impossible. Laparotomy would at least permit of a correction of the diagnosis before removal of a healthy uterus and appendages.

Can it be that operations are performed principally that young surgeons may acquire experience and dexterity, and that, if legitimate subjects of operation are wanting, the accommodating operator will perform content himself with what he can get? Alas, it is truly heartrending to have to tell these ambitious young practitioners that they will scarcely reach their desired end by these means! The removal of healthy organs is a very different thing from the removal of diseased ones. Experienced operators even meet with unexpected conditions gravely complicating the operation.

Doléri believes that about eight tenths of the women operated upon have submitted needlessly to the mutilation, which, according to his figuring, would give a result of four thousand women in Paris deprived of their ovaries (or uteri) without a sufficient cause. He himself has the best of opportunities for seeing a large number of gynecological cases, and the longer he lives the more firmly he is convinced that conservative treatment is usually more successful than the radical operation in the cure of pelvic inflammations. The latter may be justifiable for myoma and for encysted abscess of the tubes; but when constantly undertaken for follicular ovariitis, catarhal salpingitis, for pelvic neuralgia, and real or pseudo-hysteria, the subject will bear a little investigation.
Castration as a treatment for hysteria! Has it ever been applied for convulsions or hysterical hemiplegia in the male? Even supposing there be ovarian neuralgia, has the presence of hysterical neuralgia in the breast, the shoulder, or the occiput ever suggested the necessity of amputating the breast or shoulder, or of trephining? Moreover, a large number of operators entirely neglect to follow up their cases, and also dwell but little upon the mortality of the operation, whereas it is really essential, in judging of the value of the radical operation in neurotics, to ascertain (1) the result attained after the lapse of several years, and (2) the absolute demonstration that the operation is never fatal.

Antisepsis is a veritable weapon of defense to the surgeon, but so great are the abuses of operation that one is often tempted to ask whether this valuable discovery has not caused more danger than it has prevented. Neophytes in gynecology seem to have but one idea, laparotomy, sensational operation, a round dozen of castrations to start off with! Cases suddenly assume a dangerous aspect, and if nothing dangerous can be made of them, at least they necessitate an exploratory incision; but the abdominal wound is rarely closed without the extraction of—something. This is not gynecology, it is merely surgical license. Let the extremists beware! They are playing with edged tools. In the course of time people will no longer be taken in by their affectation of simplicity, their occasional acknowledgment of error—"very deplorable, no doubt"—and their absolute mania for operating.

Criticism is an ungrateful task, and the would-be righter of wrongs usually accomplishes little except to create enemies for himself. But in the face of threatened danger the honest man can scarcely adopt the principles of *laisser faire*, nor can the real gynecologists, who desire the good of their patients, and who wish to be worthy of their profession, hold their peace when they witness the excesses committed in the name of abdominal surgery. Doléris, at least, will not consent to be an accomplice in this matter by his silence, and energetically protests against the too great abuse of laparotomy and the too general adoption of the blind, the often dangerous, and rarely useful process of vaginal hysterectomy as applied to the cure of pelvic inflammations.—*American Journal of Obstetrics*.

**Typhus Fever in New York.**—The most serious outbreak of typhus fever that has occurred in the country for many years began known to the health authorities of New York late on the night of February 11th, and on the following day no less than fifty eight cases of the disease were discovered. The history of the rise and spread of the typhus is as follows: On January 30th the French steamer Massilia, of the Fabre line, arrived with 717 steerage passengers. Two hundred and fifty of these were Russian Hebrew immigrants who were aided by funds provided by Baron Hirsch, and they were first transported from Odessa to Constantinople, whence they hoped to be able to go to Palestine and settle. Being disappointed in this, through the action of the Turkish authorities, they came to Marseilles, where they embarked on the Massilia, together with a considerable number of other immigrants of various nationalities. The steamer on January 1st took on board more than two hundred Italians, and on January 12th she sailed from Gibraltar. During the voyage to New York, according to the passengers' account when they landed, they were insufficiently fed, and four died in mid-ocean. On the ship's arrival eleven passengers were still ill, three of them with what was believed to be typhoid fever, but which, as the sequel shows, was undoubtedly typhus. They were all sent to the immigrant station on Ellis Island, the Russian refugees unfortunately being permitted to land on the understanding that the United Hebrew Charities, which have charge of the disposition of the Baron Hirch fund in New York, should not permit them to become a burden in this country! They were for the most part in a pitiable state of destitution, and some $400 was expended in providing clothing for them.

One of the houses to which they were sent was on Twelfth Street, near Third Avenue, and a number of its inmates were soon reported ill. A physician in the service of the United Hebrew Charities was called to attend them, Feb-
ruary 8th, and learning that there had been cases of typhoid fever on the Massilia, he made a diagnosis of that disease. On the evening of February 11th he became so alarmed at the gravity of the outbreak, that he sent word to the Bureau of Contagious Diseases to remove some of the patients to the hospital. At 11 o'clock that night Dr. Roberts, an inspector of the Bureau, made a visit to the premises, and early the next morning Dr. Cyrus Edson, chief of the Bureau, went there to investigate, when, to their astonishment, these officers found fifteen well developed cases of typhus, and it was ascertained that the first case had occurred February 2d. These fifteen cases, together with the mothers of four of the patients who were young children, were at once sent to the hospital on North Brothers' Island, and the most prompt and thorough measures of disinfection taken in the house.

A search was then made at the other tenement houses where the Russian refugees had been lodged, and this resulted in the discovery of forty-three more cases of typhus, which were all sent to the hospital for contagious diseases. It was ascertained at the same time that about sixty of the Russians who came over on the Massilia had already been sent to situations in different parts of the country, so that they will be likely to take the disease with them.

On the day following, February 12th, eleven additional cases were discovered among the Russians. Every effort was made to trace the Italian and other immigrants who came on the Massilia, but it was found that many of them had left the city. A special meeting of the Board of Health was also held, and resolutions were adopted, taking suitable measures to prevent the dangers of infection from the immigrants from the steamer Massilia, and to provide hospital accommodation for the cases as soon as discovered. On February 13th, five additional cases of typhus were found among the Russians from the Massilia; February 15th, seven more cases; February 16th, six cases at Oakdale, Mass.; and each day is adding to the list. There are, at time of writing, eighty-nine cases at North Brothers' Island.

The whole country is more or less alarmed and disturbed, and really in a certain measure endangered by the living freight which this steamer has been allowed to land upon our shores after it had been refused the hospitality of the intelligent Turk.

We have thought it worth while to put together the main facts in the case as an illustration of the daily folly which we as a nation are permitting to be committed in the beautiful name of freedom, to the relief of other countries, the profit of a lot of steamship companies, the gradual degradation of our population, and the positive diminution in the safeguards for life, liberty and the pursuit of happiness which those already living here would like to be assured of. We open our doors to squalor and filth and misery, which means typhus fever, and we admit leprosy almost as if these things were blessings in disguise.

The reports of the Treasury Department show that for the last six months of 1891, the number of immigrants coming from Russia (Poland excepted) in those months was 46,710 as against 20,934 in the corresponding months of 1890. The whole number of immigrants was greater in 1891 than in 1890 by about 100,000, and nearly half of this increase is ascribed in the reports to Russia and Poland.

As sanitarians, with this text before our eyes, we desire to add our indignant protest to that expressed by the eminent statistician, Gen. Francis A. Walker, in a recent lecture against the results of our immigration laws. There are times when charity should begin at home. Boston Medical and Surgical Journal.

PARTURITION IN HYPNOTIC SLEEP.—Since Eve first heard that awful sentence, "In sorrow thou shalt bring forth children," pronounced from the highest tribunal upon her and her sisters, science has at times seemed determined to antagonize the biblical precept that woman must thus have her sorrows increased, and some advance has been made toward a mitigation of the severity of the punishment.

The discovery of chloroform and the application of its analgesic powers to the parturient state has made it quite possible for the child to pass beneath the pelvic arch, or, as Dr. Holmes poetically puts it, "beneath that triumphal arch through which every candidate for immor-
tality has to pass," without causing more pain to the mother than he is conscious of experiencing himself.

Dr. Oui, of Bordeaux, is as positive as his very affirmative name would make us believe he would be on any subject, that hypnotism will produce the same results in certain cases. In the *Annales de Gynécologie* for November, 1891, this gentleman, who is the *chef* of the obstetrical clinic, relates an interesting observation in the case of a primipara with hysterical tendencies, who had been repeatedly hypnotized for the cure of hysterical coxalgia. When in childbirth, and at the moment of complete dilatation, the head resting on the perineum, and the pains being so severe as to cause the patient to cry out lustily, hypnotism was induced, by closing the lids and pressing upon the globes of the eye. So long as the pressure was maintained the patient uttered no sound and the face remained absolutely calm. She obeyed, however, all instructions, bearing down when told to, and ceasing all effort on command with equal docility. A good-sized child was born and presented to the now awakened and astonished mother, who declared that she had suffered not the slightest pain.

Here, then, we have a ready method. No longer is there need of dangerous anesthetics. With one hand you take away your patient’s senses and with the other the child. Now, for the first time in the history of medicine, is a man justified in printing beneath his name, "Children extracted without pain, fresh hypnotism every day." There is only one drawback, the patient should be hysterically inclined, and hysteria is a condition not readily induced, nor would it be wise to induce it if we could; so, for the present at least, the method must have a limited application. Besides this, many investigators have shown that it is during the pains of labor, and especially of the expulsive effort, that hypnotism is produced with the greatest difficulty, though Pritzl is said to have succeeded in one other case.

Dr. Oui regards the condition in his case as closely allied to that of lethargy, with muscular relaxation and analgesia—the latter due to the hypnotic state, and not to suggestion.—*Medical Record.*

**Should Syphilitic Medical Men Continue in Practice?*—Dr. Neisser, of Breslau, has considered the question of the expediency of the continuance in practice of physicians who have become syphilitic (*Centralblatt für Chirurgie*). His communication takes the form of a reply to a direct inquiry addressed to him by a professional colleague who had been advised both ways—to continue and to retire. Neisser's conclusions are, that the necessity for a physician to retire from practice must be the exception to the rule; provided, that he shall have been under an efficient specific treatment. He offers his views chiefly on the following conditions: First, concerning the stage of the disease; second, the thoroughness of the specific treatment down to the time when practice is resumed; third, the state of the eruption, especially on the hands of the person whose line of practice is that of surgeon or accoucheur; fourth, whether any other affections of the skin, possibly not syphilitic in origin, may exist. The probabilities that a well-treated medical man will convey his disease to others are, of course, lessened in proportion to the remoteness of the date of his infection, and the lengthened interval since activity of efflorescence on skin or mucosa has been noticed; but even in recent cases, with popular eruptions and small ulcers, the writer holds that no serious danger need exist when the physician protects, as he should, the surfaces involved in the disease by means of rubber cots or impermeable dressings. In regard to non-syphilitic eruptions there is little probability of danger where any ordinary degree of care is exercised; the eruptions themselves, Neisser thinks, can not be a source of infection, with the almost sole exception that blood might be conveyed from some abraded eruption to the raw surfaces on the patient. And with regard to this danger even, he does not consider that it has been settled. As to active engagement in obstetrical and surgical practice by a syphilitic person, Neisser claims that no hard-and-fast rule can be framed, and that very much must be left to the good judgment of the practitioner and to the merits of the case at the time the question of attendance shall be raised. *Journal American Medical Association.*
Phagocytes and London Policemen.—In the Croonian lectures recently delivered by J. Barond Sanderson, before the Royal College of Physicians, on "The Progress of Discovery Relating to the Origin and Nature of Infectious Diseases," he draws attention to the difficulty of supposing that in the spread of traumatic erysipelas the invading myriads of streptococci can be effectually opposed by the leucocytes which follow in their rear, and at the same time to a very reprehensible practice on the part of the London Bobby. He says: "A similar difficulty exists as regards the more specific infections. If phagocytes are to be looked upon as policemen, whose business it is to watch over the safety of the organism, they ought to present themselves in force wherever and whenever there is danger. Now, Metschnikoff's own observations, confirmed as well by his supporters as by his opponents, show that that is precisely what does not happen; that is, that although it is perfectly true that leucocytes take part in the local reaction to which the entrance into the organism of many pathogenic microbes gives rise (they are like policemen in this respect), they neither appear at the place nor at the time that they are wanted. For if we compare the reaction which a mitigated culture produces in the subcutaneous tissue of a healthy animal with that which is evoked by a virulent one, we find that the main point of difference is that whereas in the former case, where there is no danger, our policemen assemble in force, they are either entirely absent or appear in scanty numbers where danger is imminent."

Morbid somnolence has been charged against our own guardians of the peace, but they have never yet in public been compared to phagocytes.

Many a man has resorted to the night force of the constabulary as a cure for inveterate insomnia, but once refreshed by perambulatory sleep he is ready for any emergency.—Medical Record.

Antisepsis for the Hands.—At the Johns Hopkins Hospital the use of bichloride of mercury as an antiseptic has declined to a considerable extent in favor of solutions of permanganate of potash in combination with oxalic acid. Dr. Malcolm McLean, at the October meeting of the New York Obstetrical Society, reported on his use of three formulæ, given below, for obtaining an aseptic condition of his hands. (See New York Journal of Gynecology for December.) Having briefly referred to the fact that Dr. W. H. Welch and other members of the Hopkins' surgical staff have come to the conclusion that corrosive sublimate solutions are inferior to those of the permanganate for many antiseptic purposes, the author says that he has found that the scrapings from the finger-nails, etc., taken after an ablation of the hands with any one of the ordinary antiseptic solutions, have developed, under culture in the laboratory, numerous germs. But when solutions of the permanganate of potash and oxalic acid had been used this was not the result, showing the superiority of the latter agents. The staining of the hands by the potash solution has been a serious objection, but he believes that this may be obviated by the use of a solution of hypo sulphite of soda, one part to sixteen, and oxalic acid, one part to thirty-two of water. The steps of Dr. McLean's process are, (1) The hands, having been thoroughly cleansed, are to be held for two minutes in a solution of the permanganate of potash, five parts to one hundred, after which the hands should be rinsed in clear water; (2) hold the hands for one minute in a hypophosphite of soda solution, one ounce to the pint; and (3) while this is being done add the oxalic-acid solution, one half ounce to the pint of water. This causes a double chemical combination, whereby an oxalate of sodium and sulphur dioxide are formed, which have powerful decolorizing and disinfecting properties. The permanganate stains are promptly removed from skin and nails; after again rinsing the hands in sterilized water they are ready to come in contact with either an exposed scorbutous or a diseased mucous membrane. The hands may then be regarded as both surgically and obstetrically clean.—Journal American Medical Association.

The Pan-American Medical Congress and the Rome Meeting.—The fact that the Pan-American and the International Con-
gresses are to meet in the same year, and both of them in the autumn, has given rise to the impression among some that the former was conceived in opposition to the latter. Nothing, we are persuaded, can be more erroneous than this idea, and we believe that, so far from interfering, the Pan-American will actually help to increase the attendance at the Rome meeting. Many physicians from the Southern Republics, having already taken the long journey necessary to bring them to the Washington meeting and the World’s Fair, will be prepared to extend their vacation and go to Rome, when, without this extra incentive, they might not have been persuaded to go to the International Congress.

The promoters of the Pan-American Congress were at pains to ascertain the date of the Rome meeting, so that there might be no interference, and with this object wrote to Dr. Baccelli several months ago. The latter replied that the Rome meeting would probably be held during the last week of September or the first week of October, although the exact time had not been definitely settled upon. This reply was not received until after the meeting of the Committee in St. Louis, when the date of the Pan-American had been fixed for the first week in October; but when it was learned that this would interfere with the International, the time was changed to the first week in September. This will make it easy for those who desire to attend both meetings to do so, and is evidence that the Committee of the Pan-American Congress desire to promote rather than to antagonize the International. The Washington meeting must of course be held in 1893, in order to afford the opportunity to the Latin-American members of visiting the World’s Fair, and the fact that that is also the year for the assembling of the International Congress is but a coincidence, which will, however, be of distinct advantage to both bodies.

The organization of the Pan-American Congress is in the hands of good men, the National Committee is a thoroughly representative one, and the delegates thus far selected from the other countries of the Continent are men of eminence at home, and many of them of an international reputation as well. The idea of an American Congress has been well received in our sister republics, and, now that the danger of a hostile meeting with one of them has been happily averted, there is every reason to anticipate a most successful meeting, and one that will be productive of mutual advantage and pleasure to all who take part in it. And we are confident that the entire profession in this country will labor as a unit to aid the Commission in their good and patriotic efforts, and to further in every possible way the success of the first Pan-American Medical Congress.—Medical Record.

Antisepsis; Puerperal Mortality in Paris Hospitals.—Our own correspondent in Paris last week gave interesting particulars confirmatory of the immense benefits conferred on parturient women by the application of antisepsis to obstetrics. We commend the account to the careful attention of our readers. He says that out of 1,340 women delivered in Prof. Tarnier’s wards during the past academical year only 14 died, thus giving the very satisfactory mortality of 1 in 95, or 1.01 per cent. Eight years ago the mortality calculated on the same number of cases reached 2.5 per cent, while thirty years ago 1 parturient out of 11, or 9 per cent. died. These figures prove conclusively that modern methods of conducting labor are responsible for the saving in his wards alone of 100 valuable lives per annum. This is a very gratifying report of progress and advance, and perhaps our correspondent is right in thinking that the virtue of antisepsis can go no further. Puerperal fever is now unknown in the wards of M. Tarnier, whose memory goes back to a time when he witnessed five deaths in one day from puerperal peritonitis; but there is still room perhaps for better results if we may judge from the experience of some of our London lying-in hospitals. In one of these, during the years 1888 and 1889, there was but one death in 1,272 successive deliveries.—London Lancet.

Death of Professor von Brücke.—In the death of Ernst Wilhelm von Brücke, which took place from influenza at Vienna, on January 5th, physiology has lost one of its most illustrious followers. Professor Brücke was
born in 1819, and had therefore attained his seventy-third year. He studied medicine at Heidelberg and Berlin, and in 1843 became assistant in the Museum of Comparative Anatomy at the latter University under the direction of Johannes Müller. In 1848 he succeeded Burdach as Extraordinary Professor of Physiology at Königsberg, and the following year became Professor of Physiology at the University of Vienna. There he has remained, steadily working in the sphere of science, and becoming the recipient of many honors. Professor Brücke contributed considerably to physiological literature as well as to anatomy, his works comprising two volumes of lectures on physiology, researches on the blood, on electrotonus, on the function of speech, on color-vision, and other optical questions, as well as anatomical studies of the eye, and, quite recently, a handbook of artistic anatomy.—London Lancet.

The influenza, though disappearing in some localities which were early attacked, has recently broken out in a severe form in several cities and towns both in this country and in Europe. In some cases the localities now going through the height of the epidemic are in the vicinity of those which suffered severely some weeks ago.

In acknowledgment of the success of a serious surgical operation performed by Dr. Michelsen, of Wiesbaden, on his wife, Herr von Donner, a merchant of Hamburg, has given the latter city 2,000,000 marks for the erection of a hospital in Hamburg, with Dr. Michelsen as chief physician.

To Reduce the Evils of Prostitution.—An association has recently been founded at Buda Pesth, the object of which is to combat the evils of prostitution, to rescue its victims, and to establish and maintain a free dispensary for the treatment of poor patients suffering from venereal diseases.

The Journal of Balneology.—It is announced that Dr. J. N. Bell, of Brooklyn, Dr. Frank Woodbury, of Philadelphia, and Dr. George H. Rohé, of Baltimore, are to be the editors of this journal in the departments of balneology, dietetics, and climatology, respectively.

The German Anatomical Society.—The German Anatomical Society now numbers two hundred and fifty-one members. Prof. von Kölliker is the president, Profs. His, Waldayer, and Tolbit are the vice-presidents, and Prof. K. Bardeleben, of Jena, is the secretary.

A Medical Dictionary has just been published by Boas, of Berlin. It has four hundred small pages, comprises words in German-French-English, English-German-French, French-German-English, and a Latin-German-English-French section.

The Bacteriological World has been removed from the State University at Columbia, Mo., to Battle Creek, Mich., where its editor, Dr. Paquin, has assumed control of the new laboratory of hygiene at the Battle Creek Sanitarium.

Yellow Fever.—Recent reports from Brazil indicate that the epidemic of yellow fever shows little or no signs of abating at Santos. At Rio Janeiro the conditions are much better. Yellow fever is reported in the island of Jamaica.

A Charleston doctor named Harriss made experiment with the thermometer to ascertain the ratio between the heat of the body and the upper atmosphere, 3d July, 1806.

Owing to new sanitary measures in England there has been a diminution of more than thirty per cent in the death-rate from consumption since 1861.—Lancet.

The United States Supreme Court has decided that a court may not order a medical examination of a person in a civil case against his or her will.

The American Gynecological Journal is the new name of the former Journal of Gynecology.
Original Articles.

TREATMENT OF STRICTURES OF THE LACHRYMAL PASSAGES.

BY M. F. COOMES, A. M., M. D.
Professor of Ophthalmology in the Kentucky School of Medicine, Louisville, Ky.

There are probably no diseases connected with the eye that are so far without the reach of the general practitioner of medicine and surgery as inflammations and strictures of the lachrymal canals. There are several reasons why this is so. The most important is, because there is required an absolute and perfect knowledge of the anatomy of the parts concerned in these inflammations and strictures, a practical knowledge which is difficult to acquire. Patients suffering with these ailments rarely consult a doctor until they are compelled to do so on account of pain, which has been produced by acute inflammatory action, and then the result is that the parts are so tender that nothing can be done which is not accompanied by the most severe acute pain, which is not even overcome by the use of cocaine. The result is that the patient continues to suffer, and abscess after abscess forms and breaks through the skin of the face, thus making a lachrymal fistula, and permitting the tears to flow out upon the cheek. This affords temporary relief, which may last a few days, weeks, or months, when the same old thing is repeated, and the patient fights it out, knowing full well that in the past the family doctor has been unable to render any assistance, and thus it is that such cases are neglected, and the strictures become almost or quite impassable, and when they at last reach a surgeon who can manage them he has many difficulties to contend with that a little timely advice would have prevented. Again, there are many persons who permit these ailments to run on and on until they are compelled to seek advice in order that they may be sufficiently comfortable to enable them to exist. The diagnosis of these cases of stricture of the lachrymal passages is an easy matter; the history of the case, with the constant overflow of tears, is a positive evidence that the passages are obstructed.

Simple ocular inspection usually enables the surgeon to ascertain the condition of the punctum, whether it is open or closed, and any doubt on this point is easily settled by the use of a small probe, which may be made to enter the punctum if that is free. Having ascertained this much, the little probe is passed along the canaliculus to determine if that portion of the passage is open. Meeting with no obstruction in this channel, the probe is withdrawn, and the canaliculus is freely laid open with a knife, which is especially made for the purpose. It should be opened well up to the lachrymal sac, so that, in passing the probes down through the sac, the tension on the parts at the angle, when the probe is directed downward, will not be too great. This having been accomplished, the knife is withdrawn and some carbolized glymol or alboline oil is injected into the cut, and as far into the passages as it will go, and then the process of introducing a probe into the stricture is commenced, and here, as in other strictures, the greatest care is to be taken to prevent making a false passage, and nothing but an absolute knowledge of the anatomy of the parts and cautious manipulation of the probes will give a guarantee against this accident. An impatient surgeon has no business in attempting to handle such
cases, as a little indiscreet movement of the probe may cost his patient a lifetime of trouble, by making it impossible to render a perfect cure.

In many of the cases it requires several sittings before the probes can be successfully and safely passed entirely through into the nose. This having been once accomplished, the most important part of the work is over, for with a little care the probes may be passed from day to day until the entire process has been completed. When I have passed, say a number three, it is permitted to remain for a few minutes, when it is withdrawn and some oil injected into the canal, and the next size is put in, and that permitted to remain a few minutes, and the next size put in. This last probe is allowed to remain anywhere from a half to two hours. The following day the passages are washed out with equal parts of the peroxide of hydrogen and water. I prefer the peroxide diluted as above indicated, because in its full strength it gives an unnecessary amount of pain because of its irritating effects upon the conjunctiva. In the absence of the peroxide, a solution of the bicarbonate of soda, say twenty grains to the ounce of water, makes a most excellent wash. This should always be followed by a solution of the permanganate of potash, five grains to the ounce of water. The use of these two latter solutions makes a very good substitute for the peroxide, which is without any doubt the most effective agent for cleaning pus out of the lachrymal passages. This same washing is practiced on the second day, and in fact every day, but as a rule the probes are not introduced oftener than every third day, until late in the treatment of the case, when once a week will be often enough, and at each of these introductions the probes are permitted to remain a greater length of time until toward the last of the sittings, when they can be permitted to remain as long as three or four hours.

Just how long this probing should be continued is a question which can not be definitely settled, as each case is a case within itself. There can be no definite time at which the use of the probes may be discontinued in any case. In some the use of the probe may cease in three weeks, in others it may be necessary to continue it for a month or six weeks, and in some its use may be demanded occasionally for as much as three, or even five or six months. The average time for the treatment and cure of a case of striaure of the lachrymal passages may be reckoned at from four to six weeks. At the end of this time it is pretty safe to permit a patient to go home, and if any obstruction to the flow of tears occurs he should return to the surgeon at once, for then, above all other times, is the time to remedy the evil. A delay at this time is almost certain to result in the formation of an abscess, which will run the usual course of such inflammations. The use of cocaine in the passages is a great assistance, not only in allaying the pain that is produced by the introduction of the probes, but also in relaxing the tissues along the line of the passages. The greatest care must be observed in passing tight strictures as there is danger of invaginating the lining of the canal. I think with care in the use of the force in introducing the probes this calamity can be avoided. There are but few strictures met with in the tear passages that are absolutely impervious, many of them are very close, and it often takes a number of sittings to introduce the probe. It must be remembered that it is not always possible to pass a stricture that is open, and has been passed time and again. An operator does not always possess the same sense of touch, and it often happens that if the surgeon will desist and have his patient return in an hour or two, or on the following day, he will succeed in passing what on the previous occasion seemed to be an imperfect opening. Tissues are not at all times in the same condition, and an hour makes quite a difference in many instances. It is rarely ever necessary to open the upper canaliculus. It is seldom resorted to, and only when the lower passages are occluded, or when it is impossible to pass the probe down into the sac and nasal duct by the way of the lower canaliculus.

Louisville.

The death is announced of the Hon. George LeFevre, M. D., member of the Legislative Council of Victoria.
DIPHTHERIA.*
BY J. W. WILLIAMS, M. D.

The human body is covered by skin, and the digestive tract, urethra, vagina, etc., by mucous membrane. Both skin and mucous membrane are covered by a layer of epithelium that is so arranged that solution of continuity must take place before bacteria or germs can have access to the tissues within. Hence, a wound of this epithelium is absolutely necessary to infection—to sepsis. In other words, septicemia or pyemia can not take place without a wound in this epithelial layer, through which wound the bacteria enter the blood and systemic intoxication follows as a consequence. In Case 3 below, Mr. C. had a minute scratch near the nostril, so small as to escape my notice, and in using a towel that I had used in opening an abscess upon his brother's face, who was suffering from erysipelas, he inoculated himself with the same disease with which his brother was suffering. The streptococci entered the blood through this microscopic wound, and septic intoxication followed. Case 4 affords another example. Mr. R. was suffering from pyemia. The streptococcus was found in the pus from an abscess near the outer middle of right thigh. From this abscess the streptococci entered the general circulation through the disintegrated or broken walls of the neighboring blood-vessels, and pyemia resulted.

A few words upon the process of inflammation involved in diphtheria may not be out of place. All injuries causing wounds, whether the keen edge of the flashing stiletto or the jagged and rough section of a shell, destroy the life of those cells that lie in the path of the cutting or lacerating object. The blood and lymph exuding from the vessels coagulate, and necrosis follows. If a number of active micrococci from the surrounding air or dirt attack this wound, they find a congenial soil for their development and multiplication. The fermentative decomposition here set up produces certain chemical alkaloids or extremely poisonous substances, the ptomaines. The adjacent vasomotor nerves come under their toxic influence, causing active hyperemia, and we have the first symptom of inflammation, "rubor." The dilated capillaries involved, in virtue of this very dilatation, invite a larger volume of blood, which now rushing through them with greater velocity, the red blood corpuscles become packed and finally stagnate (stasis) in the smaller arteries. The walls of these vessels give way, and the white blood corpuscles and serum are extravasated into the surrounding tissues, infiltrating their interstices, and the characteristic swelling ensues ("turgor"), the second symptom of inflammation. As a consequence of increased blood supply, marked oxidation takes place, a rise of the local temperature follows, and we have "calor" (heat), the third symptom of the inflammatory action. The action, perhaps, of the ptomaines, the direct pressure caused by the swelling, combined with the actual destruction of the nerve tissue during the resulting suppuration, accounts for the pain ("dolor") which completes the classical cycle of the four cardinal symptoms of inflammation—rubor, calor, turgor, dolor.

The infiltrated tissue, devitalized by the shutting off of the normal circulation, falls a prey to the millions of micro-organisms, and necrosis logically follows. This last step in the textual destruction results in the liquefaction of the tissues. A cavity or abscess is formed, filled with lymph-serum exuded from the injured blood-vessels in the neighborhood, millions of dead white blood corpuscles (pus cells), and shreds of necrosed tissue. The great tension surrounding a large abscess necessarily causes an overflow of its liquid contents into the surrounding efferent vessels, veins and lymphatics. The ptomaines at once enter the general circulation, systemic intoxication ensues, manifested by a marked rise of temperature, rigors, nausea, headache, delirium, and asthenia—septic fever.

The extension of septic material is twofold. First, by infiltrating the tissue interstices by columns of micrococci; and secondly, by way of the lymphatics. It seems probable that in diphtheria the Klebs-Hoeflir bacillus utilizes both of these ways. If the parts affected are loose tissues, as the tonsils and cervical glands, the infection will be rapid; if the parts are

*Read before the Academy of Medicine and Surgery, Richmond, Va., February 16, 1892.
dense, the inflammation is localized so long as the tissue-density resists the pressure of the imprisoned secretions. Inflammation has three stages:

First stage: Dilatation of the blood-vessels, the increased flow of blood and lymph to the part, slowing of the circulation, and finally inflammatory stasis, with extravasation of blood-plasma and corpuscles. In this stage the vital activity of the tissue is suspended, the functions of the part are, so to speak, paralyzed; in other words, the tissue has, to a certain extent, become devitalized, and therefore unable to resist the entrance of bacteria.

Second stage: Here this weak tissue has been removed and healthy granulations have taken its place. This healthy granulation seems to have the power to resist attacking organisms.

Third stage: Here the irritating agent no longer acts. The first effect of this irritant was to damage the part, and under its damaging influence dilatation of the blood-vessels resulted; and as a consequence of this dilatation an increased flow of blood and lymph took place. Nature is here trying to overcome the irritating cause by flushing the part with blood, by washing away the obstruction. Probably this process is often going on in our bodies unnoticed by us. If the irritant continues to act, and these measures are ineffectual, nature removes the irritating cause by necrosis and sloughing.

The tonsils and cervical glands being vascular bodies, and loose in their anatomical structure, they become easily infiltrated by columns of micrococci which burrow down to the depth of a quarter of an inch in the tissue and below the surface. (Prudden-Seibert.) Here inflammation takes place, which results in an exudation of serum and leucocytes accumulating in the upper epithelial layer of the mucosa, thus producing the false membrane of diphtheria. In view of this pathological fact, all washes and gargles are useless, just because they do not and can not reach down to the microbe burrowing beneath the surface. The mortality from diphtheria in the city of New York during ten months of the year 1890 amounted to 1,725 out of 4,840 cases, and no where is the bichloride treatment more extensively used than in New York; yet here is frightful mortality. "Of the strength of 1-500, thousands of micrococci remained alive at the end of fifteen minutes." (Prudden.) Given of this strength you kill your patient, and in weak solutions you fail to kill the streptococcus; and in either case you fail to reach the microbe. This treatment is not efficient, because it does not reach the bacilli at work below the mucosa. It does not penetrate the false membrane, but glides off its surface into the esophagus; it is not local, because the seat of the disease is not reached; and it is not germicidal, because the solution is not strong enough to destroy the diphtheretic germs. Chlorate of potassa, benzole of soda, boric acid, et omne genus, may at once be struck from the list as topical agents useful in diphtheria.

In the very nature of diphtheria the only scientific treatment must be a germicidal one. Carabolic acid and corrosive sublimate solutions, when used of sufficient strength, will inevitably produce systemic intoxication. The sooner local treatment is commenced the better the chances of preventing the general infection. An early diagnosis is therefore indispensable. A bit of the pseudo-membrane should at once be removed, dried on a cover-glass, stained with fuchsin, or gentian violet, and placed under the microscope for examination. The microscope was invented about the latter part of the sixteenth century, and Kircher suggested in 1646 that disease might be due to minute organisms. Van Leeuwenhoek, of Holland, pushed his investigations still further (1680-1723); Andy in 1701, Muller in 1786, Ehrenburg in 1833. But it was not until 1863 that Davain established a connection between bacteria and disease. And the first complete study of a contagious affection was made by Pasteur in 1863; then Koch in 1875; and finally Klebs-Loeffler differentiated the bacteria of diphtheria in 1884: "Small, slightly-curved rods, about as long as the tubercle bacilli and twice as broad; the ends are at times swollen." Dr. Pfeiffer discovered the bacillus of la grippe in 1891.

Inoculation. Breiger and Frankel, by injecting ten to twenty per cent of a three-weeks' old culture of diphtheria bacilli, produced an
immunity in guinea-pigs against the virulent form. Drs. Wood and Formad, of the University of Pennsylvania, have been invited by the National Board of Health "to determine whether it is possible to produce diphtheria in the lower animals by inoculation. Seibert has inoculated eighty animals. Here, stretching out before us, is a new and most inviting field for the scientific physician. The day will come soon and shortly when children will be inoculated to insure immunity against diphtheria as well as from smallpox. Where is the Jenner who will immortalize himself and hand down to posterity a name more precious than a monument of diamonds?

Treatment—Submembranous and Tonic. Diphtheria is a local disease, and the constitutional symptoms are due to the absorption of the toxines from the local lesion. The treatment is essentially germicidal and tonic. Both the pathology and etiology of the disease teach this. Besides, it is the most scientific and successful. "It should be clearly held in mind by those eager to draw from experimental studies on the etiology of this disease such practical lessons as shall be of value in treatment, that it seems to be fully established that in all of the cases the seat of infection and the origin of the mischief is always a local one." (Prudden's "Studies on the Etiology of Diphtheria."

The pseudo-membrane is an exudate from the deep layer of the mucous membrane, coagulated in the epithelium, and not the disease, but the result of it. If it is removed, mopped, or torn, the points of infection will be multiplied. Let it alone. Geppert has shown that "bacilli will live in a 7-per-cent solution of carbolic acid, and in a 1-1,000 solution of bichloride of mercury for twenty minutes." He also showed that the anthrax bacillus died in ten seconds if brought in contact with a 0.2 per cent solution of aqua chlori. "The obvious lesson taught by a definite conception of the nature of the germ which causes diphtheria, is not to dally with fancy mixtures which have at least a moderate germicidal power, but to get at the growing germ, as directly as the seat of the lesion will permit, with some agent that we know will kill it." (Prudden.)

Taube first made intra-tonsular injections in diphtheria; and after him Huebner. Taube used a 3- to 5-per-cent solution of carbolic acid twice daily, and reduced the mortality from 35.5 per cent to 10 per cent. Seibert, in 1891, treated thirty-five cases hypodermically, and lost only two. I treated lately eleven cases, with one death. Case six recovered and was out on the streets for eight or ten days, but was stricken with paralysis, and died on the forty-second day. The hypodermic syringe I use has five tubes or needles fixed to a plate, which is screwed to the barrel, making the instrument eight inches long. These five needles are one fourth of an inch in length. The plate is firmly held against the tonsil or pharynx, the needles boldly pressed through the false membrane down to the submucous tissue where the bacilli are at their deadly work, and the aqua chlori at once, by injection, brought in contact with them. In the mean time, however mild the case, I at once put the patient upon tonics:

Best beef.....................................1 lb;
Aqua...........................................Oij.

Boil down to one pint, strain, and season with salt and pepper, and take daily.

Should the constitutional symptoms announce the general systemic infection, the patient, being stronger, will be the more readily tided over it.

Case 1. Mr. K., age twenty-six. October 2d, 7 p. m.: Fever 104° for two days previous; false membrane on both tonsils and infiltration of cervical glands. Injection of 30 gtt. of aqua chlori at 7:15 p. m. into both tonsils through the pseudo-membrane down to the depth of a quarter of an inch. October 3d, 9 a. m.: Edema of both tonsils continue. Intense redness of throat; voice changed. Injection at 9:15 a. m.; injection again the next day. False membrane becoming detached. October 7th, discharged cured. Beef tea, one pint daily, was given this case.

Case 2. Mr. C., age eighteen years. October 9th: Fever high; false membrane on right tonsil, smaller patch on left; edema and infiltration of cervical glands. Injections. October 10th, 9 a. m.: Patient worse; edema increasing, especially of the left cervical glands. Seven p. m.: Injection, each time into both
tonsils. October 11th: No fever; false membrane an inch long; patient worse. Nine A.M.: Injection; antiseptic gargle to clear throat; injections daily; beef tea (1 lb.) October 12th, discharged cured.

**Case 3.** Mr. C., age twenty-one: High fever; false membrane on both tonsils; injection in both tonsils as before; liver torpid.

[Raw medical prescriptions and dosages are listed below.]

M. Sig. Fl. pil. ix. Dosis: Unus omni tri horae.

This corrected all hepatic trouble, cleaned off the tongue, and cleared up the complexion. First saw this man November 24th. Made daily injections for three days. November 27th: Membrane came away. Discharged cured.

**Case 4.** Boy, age ten years. High fever; false membrane on right tonsil, and on second day on left tonsil also. Injection through false membrane into both tonsils to the depth of a quarter of an inch. On third day false membrane came off. Discharged cured.

**Case 5.** Boy, age four and one half years. (In consultation.) False membrane on both tonsils and over nearly the whole of the pharynx; systemic intoxication; the septicemia well developed; heart feeble. First saw him October 15th. Injection at 11 A.M.; injection at 6 P.M. October 16th, 10:30 A.M.: Three injections; at 6 P.M. coughed up tube cast. False membrane loose and a piece came away an inch long and one eighth of an inch in thickness. Sent this fine specimen to Dr. Billings, at Washington. October 17th: Edema of cervical glands continues; croupy symptoms; bronchi involved; pulse failing.

[Prescriptions and dosages listed below.]

Dosis: Coch. parv. omni tri horae.

Septicemia no doubt caused by absorption of the ptomaines. Beef tea. Alimentary tract disinfected with thymol. Patient gradually growing worse. October 18th, 2 P.M.: Died of septic infection. I do not think any local treatment will avail after systemic septic intoxication sets in.

**Case 6.** Boy, age three and one half years; tonsils covered with false membrane; five or six ulcers on leg; had been exposed to the disease; false membrane covered each ulcer. This boy recovered; was out on the streets for a week or so; fattened rapidly, but died on the forty-second day of paralysis, as mentioned above.

**Case 7.** Lady, age twenty-six; false membrane on both tonsils; injection at once through the necrosed membrane down to the mucosa beneath where the microbes are burrowing; injections daily; discharged cured on the fifth day.

**Histology.** Prudden found the streptococcus pyogenes in twenty-two out of twenty-four cases of diphtheria examined by him. We have reasons for believing, on biological and experimental grounds, that not only is the streptococcus pyogenes an etiological factor in diphtheria, but that erysipelas and some forms of phlegmonous inflammations are cognate diseases with diphtheria. Prudden carried cultures of streptococci from cases of diphtheria along side by side with cultures of streptococci made from various cases of acute erysipelas and phlegmonous inflammation, week after week; over and over again has he measured and compared the growth from these three sources. He has repeatedly inoculated duplicate sets of animals with the different cultures, and has never found a single constant feature of difference between them. The close relationship existing between these three forms of inflammation has long since been pointed out by Baumgarten.

In the above cases I had the bedding, napkins, towels, etc., boiled in water for two hours in the same rooms in which I treated the cases. The city should establish a disinfecting house, well equipped, for this purpose, to which all clothing, bedding, etc., from infectious diseases should be sent. All exudates should be received into vessels containing a five-per-cent solution of carbolic acid.

A survey of mortuary tables shows an alarming mortality for the city of Richmond, a death-rate of over 44 per cent. Of the forty-one leading cities of the United States Richmond exceeds them all probably in her death-rate, there being 125 deaths out of 279 cases of diphtheria.

Richmond, Va.
Societies.

CLINICAL SOCIETY OF LOUISVILLE.

Stated Meeting, February 23, 1892, the President, Dr. F. Guntermann, in the chair.

Dr. Dugan: A number of months ago this young man (presenting the patient in person) came to see me about an enlargement of the head of the metacarpal bone of the index finger.

From the history, central sarcoma was diagnosed, and the finger amputated at the carpo-metacarpal articulation. Post-operative examination confirmed diagnosis. The usual antiseptic dressing was applied and left on for one week; when dressing was removed the parts looked well, there being no inflammation. The patient hurt his hand several times, and soon there appeared some swelling over the dorsum of the thumb which finally resolved itself into an abscess. It was opened, and a small amount of thin pus evacuated. Shortly after this several other swellings appeared, and the wound, which had healed, reopened in several places. Some of the pus was given to a pathologist, and he reports the presence of large numbers of tubercular bacilli, which substantially confirms my diagnosis of the last trouble—tuberculosis of the synovial sheath of the tendons, and probably the wrist-joint.

The question I desire the Society to aid me in solving is, what is best to do; shall conservatism be practiced, in view of the great importance of the hand, or shall the radical operation be performed? I feel much inclined to the former, and if the Society is not against it shall lay it all open, get rid of all broken down tissue, and dress wound in iodoform and oil. Failing in this, then amputate.

Dr. Vance: This strikes me as a case where the value of the hand should be taken into consideration, and I agree with Dr. Dugan that conservatism should be practiced. As long as there is a chance of saving the hand I think conservatism should be continued; but, if life alone is to be considered, amputation should be done.

Dr. George W. Griffiths: I am in favor of laying open the parts involved, as Dr. Dugan suggests, and treating it in that way; but I think the prognosis is unpromising. Still, I do not think it advisable to remove the hand under the present conditions. Lay it open, wash out thoroughly, and keep packed with iodoform gauze.

Dr. Bloom: As this Society is largely composed of general practitioners, it may not be taken amiss in me if I presume to give a short sketch of the disease known as sclerodermia before exhibiting a patient suffering from it.

Until recently the disease was considered a rare one. Kaposi, in 1876, says that the literature of the subject contained a record of but fifty cases; Schwimmer, in 1883, reckons the number at about double that sum; Kaposi, in the same year, can count but eighty. Since then, however, the disease has been better understood, and the number of cases described will probably amount to several hundred. Thirial first gave a thorough description of the disease, and its name, to the world; but it had undoubtedly been observed previously by Curzio in 1752, Henckel in 1809, Alibert in 1817, and probably Addison also, under the title of Addison’s Cheloid.

It may be briefly described as a chronic disease of the skin, which occurs spontaneously without inflammatory symptoms or marked change in the general system, and characterized by a hard, diffuse, indurated rigidity and relative shortening of parts of the skin, varying in size and extent.

The case before us is that of Mrs. B., aged thirty; twice married, first at the age of eighteen, from which marriage she has two children, and again at twenty-seven, one child being the result. She has all her life enjoyed good health, and, except that she is rather nervous, feels as well as she could wish. Her youngest child is sixteen months old.

Two years ago, over the metacarpal bone of the thumb on the dorsal aspect of the right hand, she first noticed a reddish spot, similar to two others on her left arm, which I will point out later. As it gave her no trouble she paid little attention to it, until some time later the reddish spot had given way to a waxy surface such as you see now. This grew for a few months in size until it reached its present
dimensions. It is now roughly oval in shape, rather sharply defined, with a long diameter of about three inches, and short diameter of perhaps one and one half inches. Aside from the ivory-like color, which is striking, and reminds one very forcibly of cicatricial tissue, you will notice the stretched appearance of the skin, the firm manner in which it seems bound down to the tendons, over which it lies, and a few superficial fissures not inflammatory, giving the appearance as if the skin had been stretched until it ruptured. The skin can not be raised into folds, nor can we discern at the bottom of the fissures any sign of a papillary layer. Indeed, the sides of the fissures, differ in appearance and color in no respect from the flat surface.

On the left arm, about three inches above the wrist, are two patches, separated about an inch, now only faintly outlined. They were much more marked when I first saw the patient ten days ago. They seem at first to be a disappearing erythema, but, if you notice more closely, the hue is a much darker one, more violet in color, and with a glass you can faintly see dilated capillaries. It was just so, the patient says, the plaque on her hand began. She did not notice the intermediate changes, and states that, after she first noticed the hardaceous aspect of the right-hand patch, it grew for a few months only from the size of a dollar to its present size, and then remained stationary, so that it may be said to have been in its present condition about twenty months. On pressure, even to a moderate extent, the patient complains of pain over the well-developed plaque on the right hand. She also complains that at various times the itching is quite intense. Sensation is about the same, as you can see on pricking with two blades of a knife, as elsewhere in that region. She does not perspire over this patch.

There was no change in the characteristics of the disease during pregnancy, or after delivery. There is no difference of temperature between the healthy and diseased portion of the skin.

The disease can scarcely be confounded with any other. Aside from the history of the case, the smoothness and evenness of the surface and its extreme rigidity would differentiate it from scar tissue. It could scarcely be confounded with cheloid, because of its shape, color, and flatness; it is not elevated from the niveau of the surrounding skin. Again, the stony hardness and its firm union with the subjacent tissues, would quickly show that it is not a case of leucoderma.

As to the prognosis, I should say in this case it is good. The disease has remained in statu quo for nearly two years. The threatening fresh eruption on the left arm is disappearing, whether spontaneously or owing to treatment I am unable to say, but am inclined to accept the former view. She is, while not robust, well nourished and in a good condition. That the diseased patch can not return to its former condition is, of course, patent to all, as material changes have already taken place in the skin, such as absorption of the papillary layer of the corium, etc. I do not place much value in the treatment, either internally or externally. I have treated two cases before this one, the first of which I lost sight of after a half year's treatment, and in which little or no improvement took place. The second I still have under observation, although the patient has refused to submit to further treatment. I can see no great change between his condition now and what it was three years ago when he became careless.

In the case which I am describing I have prescribed a solution of albuminate of iron with quinine and stricinia, because I thought the slight tendency to anemia might indicate such treatment. Locally she applies a twenty-per-cent ointment of ichthyol three or four times daily; at night she bathes her hands for ten minutes in water as hot as she can bear it, after which she practices massage over the affected part with lanoline.

I shall watch the case carefully during the next year or so, and will bring the patient before the Fellows on some future occasion.

Dr. Cecil: I am very much indebted to Dr. Bloom for the light he has thrown upon a very interesting subject, about which I knew nothing whatever until I came here this evening.

Dr. Anderson: I have never seen a case of the kind.
Dr. Cecil: I will mention briefly a case that illustrates some of the uncertainties of gunshot wounds in the body, especially in the abdominal cavity, or in the parietes of that region, and how, in this instance, we were benefited by a conservative line of action.

A negro woman, twenty-four years of age, was shot by her husband about a week ago; it was impossible to ascertain her position when she was shot—that is, the shot I am going to refer to. I would say she was shot three or four times, once in the head, making a scalp wound, once in the shoulder, once in the wrist, the fourth apparently entering the abdominal cavity. She was sent to the city hospital, and I had a message from Dr. George F. Simpson to meet him there. It being at night it was some little time before we got ready, but finally she was prepared for the examination, and the first thing that attracted my attention was a copper-colored eruption all over the surface of her body.

She stated that she was lying on the bed, or rather crouching down behind it when he fired this last shot which entered the body. The ball apparently went straight, and if it had gone into the cavity in all probability would have penetrated the cardiac end of the stomach. At the time she was put on the table her pulse was 126, rather feeble, her temperature had risen to 100.5° F.; this was probably two or three hours after receipt of injury. She had taken nothing but some whisky. Under the circumstances it seemed to be our duty to investigate this wound in the belly, yet there were no special symptoms showing the penetration of the cavity, as there had been no discharge of blood or any thing else from the wound as far as we were able to learn. The fact of the pulse being high might have been accounted for by the excitement due to the receipt of the injury, and also to the ride in the patrol wagon, which she complained of as being exceedingly rough.

I determined, in concurrence with Dr. Simpson, to investigate the wound in the epigastric region a little further. She was accordingly put under the influence of chloroform. The probe could be inserted through the opening in the skin for a short distance, and then I could not ascertain in what possible direction the bullet had gone. Now, in this case, I think we would have been perfectly justified in opening the cavity, and possibly would have done so had it not been for the unfavorable surroundings at the hospital for such an operation, which, however, proved very fortunate. But under the circumstances we determined to let the case rest as it was and await further development. She made a prompt recovery. I have no idea where the bullet went, and have heard of no further trouble. It shows in this case that apparently the bullet must have gone into the abdominal cavity somewhere near or about a point of attachment of the diaphragm, for had it gone straight it might have been in the stomach.

I have reason to believe that it went through the transversalis fascia; I could trace it with the finger just by the edge of the costal cartilage, but we could follow its course no further. I think we were very fortunate in not investigating any further into this case.

However, it may be said that my opinion of the case at the time was not as well made up as it is now.

Dr. Vance: I do not think the symptoms in penetrating abdominal wounds are as a rule sufficiently marked to allow us to take them as a guide to prevent our opening the abdomen. I believe that if a ball goes through the skin we ought to investigate, and I think Dr. Cecil did precisely right in putting the patient under the influence of chloroform and making an examination. I have seen cases where patients had five or six wounds in the intestines with less symptoms than this woman had.

Dr. Dugan: There is one point in this connection that I would like to call attention to, as it is one of our most valuable means of diagnosing or excluding perforation of the alimentary canal, yet it is, I believe, less frequently resorted to than the less trustworthy symptoms—I allude to the presence or absence of hepatic dullness. If there is tympany over the liver, perforation has undoubtedly occurred. I fully agree with Dr. Cecil in his treatment. The method of carefully cutting down to ascertain if the ball had entered the cavity, has been so forcibly impressed upon the professional mind by Dr. Stimson, of New York, in
an article published in the New York Medical Journal, in which was developed such startling results of the non-operative against the operative treatment of gunshot abdominal wounds, that I can scarcely understand why any other line should be pursued. The temperature of 100.5° F., too, was against perforation of the gut.

Dr. Wathen: I will report a recent laparotomy for the purpose of calling attention to the means of preventing stitch abscesses and ventral hernia, two things to be avoided in abdominal surgery.

On February 17th I removed the appendages of Miss X., who had been a great invalid for fifteen years, and who had been treated by several physicians but had gotten no permanent relief, and it was her constant prayer that death might put an end to her suffering. The uterus was under size, and the ovaries appeared cirrhotic. The physician, the patient, and the family insisted upon the removal of the appendages as the only means of relief. I operated last Wednesday at St. Joseph's Infirmary. The abdominal wall was three inches thick, and the subperitoneal fat half an inch thick, and the tissues were soft and flabby. The ovaries were very small and cirrhotic; tubes in almost an infantile condition, about two thirds the normal length and not more than one half the average size.

What the immediate or final results will be no one can positively say, but I think she will be greatly benefited. I have had cases of this character, and the results have been very gratifying. There was nothing unusual in the progress of the case, her pulse and temperature remaining about normal.

This kind of an abdominal wall furnishes the conditions favorable for stitch abscesses and ventral hernia; stitch abscesses, because of the soft and apparently unhealthy condition of the tissue, and hernia, because it is impossible to bring together the fascia and the several layers of tissue by the ordinary process of attempting to close the wound by stitching through the entire thickness of the abdominal wall, for if you then draw the sutures tight enough to bring the fascia in apposition you will have stitch abscesses, and it will not perfectly unite, hence hernia may follow.

I first close the peritoneum with kangaroo tendon, and then introduce with a curved needle silk-worm or hard twist silk sutures through the integument and through the deep fascia, but not through the peritoneum, about half an inch apart. The transversalis fascia is now separately united by the kangaroo tendon; then I tie the deep sutures over the wound after the usual fashion. The separate layers are now evenly cupped, and there is no tension to cause necrosis and pus, or to prevent perfect union; and there is little danger of stitch abscesses or hernia. There is nothing entirely original in this method of uniting the peritoneum and fascia and closing the wound, but very few people operate after this fashion. The idea seems to be to get the patient off the table as soon as possible, and get immediate recovery. Abdominal surgeons ought not to operate merely for the immediate relief of symptoms, but to cure the patient permanently, using such care in the operation as to avoid future trouble.

The most frequent of all causes of stitch abscesses is the strangulation of tissue where the suture is introduced entirely through the wall. If the suture be drawn tightly enough to properly unite the cut edges of the abdominal wound, destruction of tissue and abscesses may result; whereas, if we suture the peritoneum and fascia separately with the tendon, there will be no trouble.

If the above method is carefully followed, and every thing used in the operation is made practically aseptic, stitch abscesses and hernia will no longer be frequent complications, if the sutures are not too tightly drawn.

Dr. Vance: I cannot agree with Dr. Wathen in the cause of stitch abscesses. I do not think the strangulation of tissue in the majority of cases has any thing whatever to do with stitch abscess, but it is due to uncleanliness rather than strangulation. This was discussed at a meeting of the McDowell Medical Association some year or so ago, and Dr. Walker reported that the use of a strong solution of carbolic acid was probably the cause of a great many stitch abscesses, which, to my mind, is about as improbable as the strangulation theory.
If the work is properly done, and due care used in closing up the wound, I do not think we need fear stitch abscess. I cannot agree at all in the idea of strangulation.

Dr. Wathen: It has been conclusively demonstrated a thousand times that suture strangulation does cause stitch abscesses, and I need consume no time in replying to that part of Dr. Vance's criticism. Of course any uncleanliness should be avoided, but if your stitches are drawn too tightly you will have stitch abscesses every time, for bacteria, otherwise harmless and nearly always present, will then become pathogenic and cause pus.

Dr. Vance: I still can not agree with Dr. Wathen. If the wound is properly cleansed, all bacteria, etc., washed out before being stitched, it matters not how tightly the sutures may be drawn, it will not cause stitch abscess.

Dr. Wathen: It is next to impossible to close an abdominal incision and dress it in an absolutely aseptic condition.

Dr. Krim: A lady came to my office some time ago who said that she had never menstruated in her life, and she was forty-two years old; that she had a sister four years older who had never menstruated, and another sister who is thirty-eight years old and has three children. She complained of no pain, but said she had some bloody oozing which came on about two weeks ago. Upon examination I found a mucous polypus about the size of a pea on the posterior lip of the os, apparently loose, as I picked it off with a pair of scissors, and touched it with chronic acid. I examined her carefully, and found the uterus fully developed; found nothing wrong about it. What puzzles me is why she never menstruated.

It is the first case in my experience. There were three sisters, and two of them never menstruated.

Dr. Satterwhite: I would like to bring up a subject of some little interest with regard to a young lady who had been regular in menstruation for a number of years (five or six years or more) and then gradually ceased. The question I want to bring up is whether or not something should be done to restore her menstrual periods. Otherwise, is it not likely to cause disturbances in one way or another? She is about twenty-five years of age, and the point is, should she never menstruate again will it in any way affect her former state of health? When this function has been established in a woman it seems to me its cessation or suppression is liable to cause serious disturbances. Ought the function to be restored, that is, ought we to make an effort to restore it?

Dr. Wathen: If her health is good the menstrual function will be restored as readily without treatment as with it; treatment would do no good. I should give her nothing.

Dr. Vance: Some two years ago, perhaps a little less, a gentleman, forty-four years of age, came to me with the history that he had been having for the past two months considerable pain in the upper part of the left thigh-bone. Upon examination I found that the thigh measured two and a half inches greater than the other, with marked enlargement of the bone. I told him it was rather a suspicious growth, and I thought it was rather a serious matter; that I would like to see him again in five or six weeks, especially if there was any further enlargement. I did not see him any more until about two weeks ago, when I was called (not knowing his name, did not know it was the same party) to see a gentleman, and found that he had been operated upon shortly after I had first seen him. According to his statement there was nothing came from the bone but some little grumous blood. At the time I saw him last the thigh was perfectly immense, and there is no doubt but the growth was what I first suspected—sarcoma.

This case illustrates the point that we ought to be very careful to make a diagnosis when practicable. Probably if he had come back to see me, as I requested, amputation would have been accepted, and his life saved.

Dr. Satterwhite: I was called to see this case in consultation, and advised amputation.

I. S. Murthy, M. D.
Secretary.

Prophylaxis of Influenza.—At a recent meeting of the Académie de Médecine of Paris, Ollivier said that he had found cod-liver oil a prophylactic against influenza, especially in children.
NEW YORK ACADEMY OF MEDICINE.

Meeting of February 11, 1892.

In the Section of Pediatrics (Dr. William P. Northrup, Chairman), a case of spina bifida was presented by Dr. A. Jacobi. The patient was two months of age, and the tumor which was present at birth was growing rapidly. The wall was becoming thin over the central portion, and without operation would soon burst and the child die. There was also talipes valgus, and the sutures fontanelles were very large.

A demonstration was given by Dr. M. Putnam-Jacobi to prove the fact that when the lung is collapsed percussion yields tympanitic resonance, but when extremely inflated exaggerated pulmonary resonance.

DISCUSSION ON DIPHTHERIA.

Dr. Joseph E. Winters read a paper entitled The Best Apparatus and Best Disinfectant for Use in Mouth and Nose.

The author assumed that the disease is caused by the Klebs-Loeffler bacillus; that it is primarily a local disease, the microbe elaborating in the exudate a poison which is absorbed and carried into the circulation, the germ itself not being formed in the blood or tissue. A point of vast importance in treatment is the fact that the specific germ on a perfectly healthy membrane does not provoke diphtheria. The primary indication, then, is not only to cleanse and disinfect the parts, but to destroy the germs in situ.

The activity of the Klebs-Loeffler bacillus is impaired by even weak solutions of carbolic or boracic acid. The practical deduction is, that at the outset we should attack the exudate or culture-soil in order to prevent the microbial products from producing constitutional results. It is never safe, however, to employ means that will irritate the surrounding parts, for fresh points of infection are thus made. The only means of satisfactorily disinfecting the throat and preventing sepsis is by irrigation.

For this purpose the child should be placed on the side of the crib, and the rubber sheet arranged to catch the drippings, but he should under no circumstances be lifted from the horizontal position. If a Davidson syringe be used the cleansing will be more complete and will meet with less resistance than with any other apparatus. The irrigating should be done through the nostrils, for they can not be tightly closed like the mouth, and with the first flow of fluid from the nose into the throat the mouth is opened and every thing is discharged through the nostrils and mouth. It is occasionally necessary to syringe through the mouth. In this case the tip should be removed and the tube pass along the inner side of the cheek behind the last molar to the pharynx. In ordinary cases irrigation every two hours is sufficient. In severe cases it must be practiced every hour day and night.

For this irrigation nothing has proved as satisfactory as a ten-per-cent solution of peroxide of hydrogen or a saturated solution of boracic acid. The passages must be thoroughly cleansed at each washing, and one pint of solution will be required. In the local treatment of diphtheria is included medicated steam from a croup kettle, and the inhalation of sulphurous acid gas through the burning of sulphur candles. For medicating the water in the croup kettle add one pint of water, one ounce of spirits of turpentine, and two drams of oil of eucalyptus. In the use of the kettle plenty of rubber tubing is necessary, and the gas stove is the best means of generating the heat.

Dr. H. D. Chapin read a paper on Quarantine and Disinfection in Limited Apartments. The management of diphtheria in tenement houses formed the chief subject of consideration. The furniture should be removed as far as possible and the child placed on a cheap cot instead of a bed or sofa. The mother, if she must also attend the rest of the family, should wear a wrapper which can be removed upon leaving the room. The area of contagion, when ventilation is good, is small, probably but a few feet. If the germs can all be destroyed in situ, there will be no contagion. Old cloths or pieces of cheese-cloth should be used about the patient and burned as soon as soiled. All articles of bedding should be shaken on the roof and exposed for a considerable time to sunlight and air, the two most powerful anti-septics at our command. The walls should be washed down with a sublimate solution, one to
one thousand, and the same should be used in sinks and closets. Papered walls may be cleaned with stale bread crumbs. The burning of sulphur, while it may not be of great efficiency, is undoubtedly of some value. It leads to thorough subsequent ventilation at least. The throat and nasal passages of the other children of the family should be frequently sprayed with mild antiseptic solutions.

Dr. L. Emmett Holt read a paper upon Feeding in Diphtheria and Methods of Forced Feeding. In a disease like diphtheria, where the principal cause of death is asthenia or exhaustion, no question can exceed in importance that of nutrition and stimulation. The most common error in this direction is overfeeding and overstimulation during the first few days. It too often happens that when the critical period arrived the overburdened stomach refuses to do its work. The subject may be considered under three heads: (1) Character of food and stimulants. (2) Frequency of administration. (3) Forced feeding.

As to the character of food little need be said except to condemn two articles frequently allowed, ice-cream and jellies, which interfere with taking more valuable food. The main reliance must be upon milk diluted according to the age of the child. Next to milk, beef broth, mutton broth, expressed beef juice, soft boiled eggs, milk-toast, wine whey, oatmeal, or barley gruel. Junket, with a little wine added, and kunnyss, when the child will take it, are valuable additions to the list.

In regard to the stimulants, brandy is best, but we must be guided by the child's whims and give what he will take best. Experiments with stomach-washing show that the stomach is rarely empty sooner than two hours after the meal. It is a safe rule never to give food requiring digestion oftener than this. Stimulants and predigested food may be allowed at shorter intervals. The quantity of food given should be somewhat less than the child would take in health. It is best not to begin stimulants until they are indicated by the pulse or prostration, but they should then be pushed until the desired effect is produced, the only limit in many cases being the tolerance of the stomach. Unlike food, they should be given in frequently repeated doses. A careful record of the exact amount of food taken and retained should always be kept that we may know where we stand.

It sometimes happens that the child absolutely refuses all nourishment and stimulants. Coaxing, threats, and commands are alike futile. Efforts to compel the child to take milk in teaspoonful doses result in the wasting of an immense amount of strength, while little or nothing is accomplished. It is at this junction that the question of forced feeding arises. Rectal feeding in young children, owing to irritability of the sphincter, is almost impossible. Much more efficacious and with far less disturbance to the patient is forced feeding by the mouth or nose. The difficulties are surprisingly small. The ordinary apparatus for stomach-washing is all that is required, the method of procedure being the same as in that process. Unless there is much resistance the mouth is to be chosen. Completely peptonized milk is to be preferred. The operation should be repeated once in four hours. In this way a proper amount of nutriment can be introduced with far less worry and resistance than by the spoon method. The operation was demonstrated upon a child of ten months, a sufficient amount of milk being introduced in about ten seconds.

Dr. A. Jacobi spoke upon the subject of Constitutional Treatment in Diphtheria. He has been convinced of the value of bichloride of mercury in all forms of the disease, especially the laryngeal. He gives it in large doses. A child of six months will take a quarter of a grain a day with no untoward symptoms. Diarrhea is rare and is quickly checked by a few drops of paregoric. Stimulants should not be delayed until signs of heart failure appear, for when that condition has once developed the patient is almost certainly lost. Very large doses are sometimes required, and they should be increased until an effect is produced. The doses of digitalis, camphor, and alcohol, as stated in the text-books, are no guide whatever. If rejected by the stomach they should be given hypodermically. One part of camphor dissolved in four parts in sweet almond oil may be given hypodermically with but slight local disturbance.
Dr. August Seibert demonstrated his method of Sub-membranous Antiseptic Injections. If the Klebs-Loeffler bacillus generates a poison within and underneath the pseudo membrane, that is the place to attack it. He has therefore devised an implement consisting of a number of hypodermic points set closely together on a small disc, by which an antiseptic may be injected beneath the membrane. As an antiseptic he employs very strong chlorine water. The method has now been in use eighteen months with strikingly surprising results. It is designed to supplement not to displace other local treatment, the injections being made but once a day, one or two, as a rule, being sufficient.

Dr. Beverly Robinson inquired if fluid introduced into one nostril did not usually pass out by the other. Dr. Winters replied that in young children a portion passes by the mouth. Dr. Vineberg approved of sulphurous acid gas, as it gives marked relief to the patient.

Dr. J. Lewis Smith said that he used a stronger solution of peroxide of hydrogen than that proposed by Dr. Winters. Stronger solutions can be used in the throat than in the nose.

Dr. Stowell said that the strength of the solution must be graded to suit the case. Peroxide of hydrogen, if too strong, will cause irritation.

Dr. Holt said that in a personal trial he had found a ten-per-cent solution too strong for comfort.

Dr. C. W. Allen described a screen of plain glass which he had seen used in Germany. It is held before the face of the patient during the examination of the throat. It does not obstruct the view and is an admirable protection to the physician if the patient coughs.

The Chairman urged that inasmuch as we now know the specific germ which causes diphtheria and its habitat, that we definitely considered what remedies are for its destruction, and what are for the simple comfort of the patient; that the physician spend his time destroying the germs which are thrown off directly from the patient’s mouth, and less to blaming sewer gas and germs constantly floating in the air.

Dr. Fischer had made a series of examinations in tenement houses, and had found the specific bacillus in the air in a number of instances. In one house four cases developed on different floors along the same line of pipes.

Dr. Floyd M. Crandall, Secretary.

Reviews and Bibliography.


If the excellence of a work may be gauged by its popularity, Dr. Hammond’s treatise might be regarded as beyond the reach of criticism. With this, it has reached its ninth edition, and it has been translated into the French, Italian, and Spanish languages. If it has not been translated into German, yet in reading German works one finds very frequent references to it, showing that it has there also been extensively read by the scholarly physicians of that country. Nor can the most severe critic deny that the work is a great one, though he might with reason contend that it suffers in comparison with some more recent candidates for public favor. The feature in which the later editions have fallen is in the breadth and depth of pathological, as well as physiological research, which serves as a basis of diagnosis and treatment.

When the work first came out it was a pioneer in the field of nervous diseases; the author is a brilliant and vigorous writer, his imagination vivid, and his manner bold. It is not surprising that he was led to take some positions from which, in a measure, he has been compelled by wider knowledge to retreat.

There still remains much luggage in the work in the way of too extended reports of cases and autopsies. The great orator does not complete an anecdote to illustrate a point, he merely refers to such parts as serve for illustration, and leads the awakened curiosity back to his theme. Anecdotes are to catch groundlings. So, when an author gives report after report of cases, and details autopsies, giving
negative as well as positive features, details that have a bearing, and details that do not, we know that he is simply padding; at all events he fatigues attention instead of awakening curiosity and interest. We can excuse it only when the subject can not be illustrated without it, or in one who has full title to our time.

In his first editions Dr. Hammond made much of spinal anemia, a disease of which Gowers, in his classic work, speaks so slightly. In this edition the subject still holds considerable proportions, but is not treated of so confidently as formerly.

Tetany, as in former editions, does not receive any attention at all. This would not be remarkable if the author relegated the various forms of spasm, that by Trousseau, Gowers, and others are so denominated, to the category of reflexes, and divided them out as do the specialists among their various branches. But to this he is not at all prone, and the supposed reflex troubles get no excessive recognition at his hands.

Tetanus stands where it did in the old time, and no effort is made to trace it to a bacterial origin.

The subject of stigmata receives some attention, and is relegated to the hysteroid affection known as ecstasy. His conclusions are those of all scientific men of the present day, that there is nothing more miraculous about any of them than there is about the ordinary circulation, and that they are wholly due to trophic forces, determined by the peculiar state of mind of the patient.

Less attention than even Gowers does Dr. Hammond give to neurasthenia, not even mentioning it as a disease. Some of his cases of cerebral congestion had as well, it seems to us, have been called by that name, or some other that is a cloak for ignorance.

In the treatment of nervous diseases Dr. Hammond, not overcredulous in other matters, is blessed with an abundant faith in the action of medicines much more than the average of good authorities.

In conclusion, to say that this old and popular work needs re-writing on the basis of the profound anatomical, physiological, and psychological research of recent years is only to empha-

size the progress this department of medical science has made. A few years ago the work was in the very van. And, unless it may be Charcot, we believe it can be safely said that no other man living or dead has done so much, or now ever can do so much to direct attention to and arouse interest in the study of nervous diseases, and this we can say without being altogether partial to Dr. Hammond and his methods. In the domain of mental science he is secure of immortality. He has made discoveries in the physiology of the nervous system, and at least one interesting disease he discovered and first described and named.

It matters not how much contemporary fame one may gain, nor by what methods he may gain it, he can have no place in history as a man of science unless he shall have made some original observation, some discovery that increases the stock of human knowledge.

D. T. S.


Foster's Physiology would probably be placed by universal verdict at the head of all works of its class that the English speaking world has yet produced. It appears to be a complete storehouse of physiological lore. Indeed the number of facts given is so large and the deductions from them so comprehensive, that one can not well avoid a feeling of discouragement at the thought of the task a familiar acquaintance with them involves.

One would perhaps be safe in concluding that, outside of chemistry and anatomy, a complete mastery of such a volume would involve more study than the whole course of medicine thirty years ago.

The work is deserving of unstinted praise, unless indeed an arrangement whereby the more important parts were set in bolder type might be suggested to facilitate an understanding of the subject on the part of the student.

In some special features the author seems
not to have adopted some of the views set forth by writers and accepted by some high authorities in physiology. Thus the doctrine of phagocytosis in connection with leucocytes and blood plasma appears to have received no recognition from him. He gives the origin of leucocytes as from the lymph corpuscles, but does not give the origin of the lymph corpuscles themselves. Will some future edition admit the discovery that the lymph corpuscles are themselves minute offshoots from the leucocytes of the blood-stream? Phagocytosis, both on the part of the leucocytes and the blood serum, and also perhaps the lymph, is too momentous a fact in physiology to be passed over in silence. And, here again, we may ask if we may not hope to learn that all the cavities and canals of the embryo are not hollowed out by the action of leucocytes? After the organizing nerve forces decide that certain parts of the solid mass through which the vagina, for instance, is to be tunneled, will the rejected particles move away of themselves, or will the only quasi-intelligent bodies we know of seize them and remove them?

These are questions that some time we expect our great physiologists to answer.

The chapters on the functions of the brain are especially exhaustive, without trespassing on the domains of psychology.

The American editor has made several valuable additions and emendations, and, what is more remarkable and greatly to his credit, his name does not anywhere appear.

A Practical Treatise on the Diseases of the Ear, including a sketch of Aural Anatomy and Physiology. By D. B. St. John Roosa, M. D., L. L. D., Professor of Diseases of the Eye and Ear in New York Post-Graduate Medical School, Surgeon Manhattan Eye and Ear Hospital, etc. Seventh edition. William Wood & Co. 1891.

A few years ago we commended this book to students and practitioners as the best treatise on the subject in the English language. The present edition shows but few changes have been made. These consist mostly in an interesting history of the operation on the mastoid, and a discussion of the advisability of removing the drum-head and ossicles in chronic middle ear disease.

The author also elaborates that portion treating of the relationship between diseases of the nose and naso-pharynx and the ear, and, I think, gives a timely warning to those who have recently become so enthusiastic as to look to the treatment of the nose for all cases of chronic middle ear disease. He says when rhinologists have acquired a larger experience in diseases of the ear, they will not be so confident as some of them now are of curing chronic aural disease by removal of nasal stenosis. We are sure that cases present themselves to otologists daily showing the evil effect of too much nasal surgery. A wise discrimination is necessary in the treatment of the throat for the cure of ear diseases. J. M. R.

1. Insomnia and Hypnotics. By Germain Séé, M. D. Translated by E. P. Heard, M. D. 112 pp.

No. 1, though advertised as a translation of a recent monograph by Germain Séé, is really an original production of Dr. Hurd. While not so exhaustive as the more pretentious work of McFarlane, it is a monograph of superior merit.

No. 2 is a convenient, clear, and full presentation of the various processes of urinary analysis and the significance of their results. It could, probably, not be easily improved upon without the use of colored plates.

No. 3. This monograph, by Dr. Allan McLane Hamilton, is what might have been expected of the gifted author. The best thing connected with it is that the author has drawn from his own experience, and suggests the remedies approved in his own practice.

The three volumes form a very creditable addition to the Physicians' Leisure Library of George S. Davis.

In the town of Warrensburgh, New York, is a baby three months old, whose mother is not yet fifteen, whose grandmother is thirty-three, and whose great-grandmother is only fifty-four years old.
The American Practitioner and News.

Correspondence.

London Letter.

[FROM OUR SPECIAL CORRESPONDENT.]

Color Blindness; The Hospital Saturday Fund; Pental: Treatment of Inflammation of Vermiform Appendix; New Appointments; The Atmosphere and Epidemics; Prussie Acid and Suicide: An Intestinal Antiseptic; Salol and Eczema; Dr. Burns and the National Drink Bill.

In a lecture on the subject of color blindness, the lecturer said that his hearers would be surprised to learn that one out of every twenty-five men that they met in the street was affected in the power of distinguishing colors, and would not see a given color as the other twenty-four saw it. Females were much better in this respect, not more than one out of every two hundred and fifty ladies being affected in this way. The earliest discovered case of color blindness was in 1777, when it was recorded that a shoemaker named Harris suffered from the affection, and a scientific inquiry was made into his symptoms, which showed that he mistook orange for green, and black for brown, and could not distinguish red cherries from their surrounding green leaves. The lecturer described the theories held by Young and Herring as to the cause of color blindness, and said that many people who suffered from it were quite ignorant of their defects, and it was sometimes most desirable from the nature of their occupations that they should be made aware of the fact.

Labor troubles have had an adverse influence upon the Hospital Saturday Fund, whose principal source of income is the weekly workshop collection. Last year the contribution of the building trade absolutely disappeared, owing to the prolonged strike, and the result of this and kindred conflicts is that the income for 1891 was £19,683 as against £20,333 in the previous twelve months.

Some new testimony to the value of the new anesthetic, pental, has recently appeared. Prof. Mering has continued for some time to use the compound largely, and devised the most suitable form of mask for its administration. From his experience he concludes that pental is an excellent anesthetic for minor operations of all kinds. During the last six months Dr. Mebes, in the institution to which he is attached, has employed the discovery in cases of minor surgery. The agent has been frequently administered during this time, since as many as six or eight narcoses were made daily with it. Pental is considered to be no longer an untried compound which has still to be tested, but one that by a number of brilliant successes has established itself in materia medica.

At the last meeting of the Clinical Society of London an interesting discussion took place as to the treatment of inflammation and perforation of the vermiform appendix. Dr. Page related his experience of a case in which symptoms had lasted for twelve weeks. When the appendix was removed, a large subperitoneal swelling in the iliac fossa was not opened. The wound having healed by first intention, pus began to flow from the track of the drainage-tube. Profuse burrowing suppuration continued for many weeks, the man's life being in great danger; ultimately, he was discharged well, and continued at work in good health. Dr. Page thought this was an instance of subperitoneal suppuration, and illustrated the dangers which might arise in cases without perforation, and where the cause of the appendicitis had been other than concretion. He was strongly in favor of early operation in all cases in which the symptoms were severe and a distinct iliac swelling could be felt, and he considered there were no means of determining the precise nature or of predicting the course of any case, and the character and grade of the symptoms must be the measure of the need for operation. The presence of active inflammation was no bar to it in the early and acute stage. As to the cases of "relapsing" appendicitis, he thought a period of quiescence should invariably be chosen as the time of operation, these cases would in all probability become less common than they were. As to the operation, he found it much easier in the earlier stage than when the parts were firmly matted together by adhesions, and there was then also less risk to the patient than was entailed by delay and chances of suppuration.

In support of his argument he referred to cases
operated on by Stimson and others in the early acute stage, and to the case of his own described by Dr. Lees, where a perforated appendix was removed on the third day with the best possible results. The case of a medical student was also mentioned, who had had several attacks of appendicitis in the course of five years; who, after an acute attack in October last, was submitted to operation during a period of quiescence. The abdomen was opened by an iliac incision, the appendix found sharply kinked, distended with simple mucus; the walls were much thickened, but there were no signs either of ulceration or concretion. Firm adhesions bound it to the cecum and to the neighboring coils of intestine. The removal of the appendix was followed by a rapid and complete recovery.

The Queen has approved of the appointment of Dr. Thomas C. Allbutt to be Regius Professor of Physic in the University of Cambridge, in the room of the late Sir George Paget; and the Duke of Edinburgh has appointed Mr. William Hickman to be Surgeon in Ordinary to his Royal Highness in the room of the late Sir Oscar Clayton.

Before the Royal Meteorological Society a paper has been read on "The Untenability of an Atmospheric Hypothesis of Epidemics." The author was of the opinion that no kind of epidemic or plague is conveyed by the general atmosphere, but that all are caused by human conditions and communications capable of control, and this principle was shown conclusively to be true of the prevailing disorder. At the same time another Fellow of the Society propounded the theory that the influenza had resulted from the great eruption of Krakatoa in 1883. He had come to the conclusion that the dust derived from the interior of the earth may be considered the principal factor concerned in the propagation of the epidemic, and that as this volcanic dust invaded the lower levels of the atmosphere, so a peculiar form of sickness assailed man and beast.

A recent case of suicide in the metropolis has again drawn attention to the action of prussic acid. This case controverted the general supposition that the action of this poison is so rapid that the person taking it has little opportunity of doing any thing, but immediately yields to its disastrous effects. The recent victim was able, after taking the poison, to get into bed, arrange the clothes, and draw a pillow over his face. It has been pointed out that the toxic action of prussic acid is not always so rapid as is generally supposed, inasmuch as Prof. Wynter Blyth cites instances in his work on poisons in which death has not taken place for some considerable time after swallowing the poison, of which he gives the following instance: "After taking the poison in bed, he rose, walked round the foot of a chest of drawers standing within a few yards of the bedside, placed the stopper firmly in the bottle, and then walked back to bed with the intention of getting into it, but here a giddiness seized him and he sat down on the edge and became insensible. On this occasion a large dose was taken."

The anniversary dinner of the Medical Society of London will be held at the Whitehall Rooms, Hotel Metropole, early in March.

A most satisfactory intestinal antiseptic is said to be formed by the mixture of salol, salicylate of bismuth, and bicarbonate of soda, of each 150 grains, to be divided into thirty powders in capsules. One capsule to be taken before breakfast and one before dinner.

Eczema has been noted as sometimes following the external application of salol. Though the medicament appears to be well tolerated by the digestive mucous membrane, when employed externally on a mucous surface, it is apt, it is found, to produce eczematous inflammation.

According to Dr. Dawson Burns the people of the United Kingdom last year spent over one hundred and forty-one millions sterling in alcoholic beverages, an increase of a million and three quarters as compared with 1890. The increase was, however, in a smaller ratio than it was in 1889-90. The whole of the increase is due to the greater consumption of British beer and spirits, there having been a falling off in the quantity of foreign and colonial wines and spirits used.

London, February, 1892.
Abstracts and Selections.

An Outline of the Application of Microscopy to Pharmacy.—(H. M. Whelpley, M. D., Ph. G., F. R. M. S.) A large proportion of those who find the time to make use of the microscope are interested in revelations made by the instrument solely from the standpoint of amateurs. Such persons may have their hobbies, some devoting much time to diatoms, others confining their attention to crystals, while a few gather and study the sands from all parts of the world; or it may be only the hairs of various animals that occupy the time of a microscopist. Any one who has ever studied with the microscope for a few years becomes so in love with the useful and interesting instrument, that he is anxious to see others share his familiarity with microscopy. I do not think that the amateur who works with the microscope could otherwise spend the time more profitably or pleasantly. However, I cannot help but feel that the true field for microscopy is not the one cultivated exclusively for amusement, but it is that one which bears scientific fruit. At the present day there is scarcely a single profession or trade where the microscope is not at least occasionally called into play, and it is in these fields that the American Society of Microscopists, as a scientific body, should manifest the greatest amount of interest. While we encourage the amateur in his devotion to the microscope, we must also push the instrument in all directions where it can possibly better reveal to science any of the laws of nature, aid professional men in the work they have before them, or further the welfare of any trade or industry.

For a number of years I have studied the use of the microscope, as applied to pharmacy, and have had the gratification of seeing the instrument growing in increased favor among the pharmacists of this country. As individuals we can not help but be interested in the pharmacists, on account of the position they hold, which is midway between the physician and the sick-bed, our very lives may at any time depend upon their ability and integrity. Since one of the first laws of nature is self-preservation, we must individually care for any improvement the pharmaceutical profession makes. As microscopists we have a friendly feeling for all persons whose occupation requires a knowledge of the use of the microscope. Since there are no works especially devoted to the use of the microscope in pharmacy, I thought that it might not be out of place to give you a short outline of the application of microscopy to pharmacy. The application covers quite a broad field, and to follow out any more than the crudest outline, would require a greater amount of time than can be devoted to a paper of this nature.

An entire article could be written upon the history of the forms in which medicines have been used during the past two hundred years. The present tendency of pharmaceutical knowledge is to do away with the crude forms of medicine, and substitute for them the active principles, which are not only more readily administered, but also give more definite therapeutic results. This condition of affairs renders the use of the microscope of greater value to the pharmacist of the present time than it was to those who lived but twenty-five years ago.

The consideration of the Application of Microscopy to Pharmacy can be divided into two parts; First, the use of the simple microscope; second, the use of the compound microscope.

1. The Use of the Simple Microscope. (a.) The student of pharmacy learns early in his college days that the simple microscope is almost indispensable while pursuing the study of botany. The importance of botany is recognized in every pharmaceutical college, because its principles rest at the foundation of the knowledge of vegetable drugs. The proportion of animal drugs used today is very small, so that the study of zoology in colleges of pharmacy is usually overlooked.

(b.) In order to study drugs, the pharmacist classifies them according to their organoleptic and other characteristics. This system is not without fault, but it is nearest perfect of any that has been devised, and it has been adopted by all works on materia medica which are intended solely for the use of pharmacists. While many of the physical characteristics of the vegetable drugs can be studied with the unaided eye, there remains a large proportion which requires the use of the microscope. Medicinal leaves closely resembling each other can be distinguished by a microscopical examination of the hairs found upon their surface; as an example, we take mullein leaves, which are thickly covered with beautiful stellate hairs, aconite leaves are sometimes adulterated with mullein leaves, but the stellate hairs enable the simple microscope to show the difference, even after the leaves have been pressed and otherwise mutilated. The hairs found upon aconite leaves are less numerous than the mullein hairs, and further distinguished from them by not branching. The fissures, ridges, warts, hairs, scars, etc., found on barks, leaves, rhizomes, woods, and other parts of the plants employed in medicine, are physical characteristics which can be distinguished by means of the simple microscope, and aid the pharmacist in recognizing vegetable drugs.
(c.) The simple microscope again comes into play for the pharmacists while examining many of the medicinal preparations, in order to determine their quality or prove their identity. In some instances the United States Pharmacopeia prescribes that the simple microscope should be used in testing the quality of preparations; as an example, we have the ordinary mercury ointment, which is a mixture of metallic mercury with animal fats. The Pharmacopeia states that this should be mixed until the globules of metallic mercury can not be distinguished by means of a microscope magnifying ten diameters.

(d.) The simple microscope may also be made serviceable while testing the quality of some of the utensils used in a pharmacy. As a case in point, we cite the examination of sieves to see that they have the proper number of meshes to the linear inch. Some of the finer sieves would require the use of the compound microscope, while the simple microscope will answer in the examination of the coarser sieves which are more commonly used.

(e.) The simple microcope is a convenience when attempting to make out the prescription number upon soiled labels, which pharmacists receive when prescriptions are to be refilled. It is also convenient in the examination of bills which are suspected of being counterfeit. It can be used when it becomes necessary to remove a splinter of wood from the flesh, and there are a thousand and one other instances where the pharmacists can conveniently make use of the simple microscope. Some of the insects which infest drugs are appropriately studied by means of the simple microscope. Customers may also be interested in the instrument, and its use is then turned to a commercial advantage, by drawing trade.

2. The Use of the Compound Microscope. (a.) The study of vegetable histology is of as much importance to the educated pharmacist as animal histology is to the qualified physician. While work in vegetable histology does not require the use of an instrument with as high powers, or present as many difficulties as are found in animal histology, still the microcope is just as essential in this line of investigation as in the one followed by physicians. The different vegetable tissues are as readily recognized as bone and muscle. A pharmacist can as easily distinguish a section of wood from a section of bark as an animal histologist can tell a section of bone from a section of epidermis. The arrangement of the various tissues in corresponding organs of different plants is quite characteristic, and one who is versed in the work can distinguish a transverse section of dandelion root from a similar section of chicory root.

This is simply one example of how the microscope will enable the educated pharmacist to identify a genuine drug or detect an adulteration.

(b.) The United States Pharmacopeia, the dispensatories, which are commentaries upon the Pharmacopeia, and all works on materia medica for pharmacists recognize the importance of studying the microscopical appearance of transverse sections of vegetable drugs. While the Pharmacopeia is not an illustrated work, it gives quite explicit descriptions of the appearance of drugs, as seen under the microscope. In the commentaries on the Pharmacopeia and the works on materia medica we find illustrations of drugs as seen under the microscope. The study enables the pharmacist to identify drugs, tell the quality, detect sub-titulations, adulterations, sophistications, and admixtures.

(c.) The study of the microscopical appearance of powdered drugs has not been carried to that degree of perfection which has been reached in vegetable histology; however, the field is an inviting one, and it is here that the pharmaceutical microscopists of the future will be able to do the most valuable work. Some idea of what can be done is shown by the work that the Department of Agriculture of the Government is doing in the examination of spices. (See "Bulletin No. 13" of this department.)

Many of the histological elements of plants are such that they are readily recognized, even in the mutilated condition found in powders. It is often possible to identify cells which constitute wood, cells from pith and other characteristic cells, like the bast of cinchona, the stone cells of cinnamon, and the pitted ducts of red cedar. I remember an instance where a sample of powdered red pepper was simply fine red cedar sawdust flavored with the oleoresin of pepper. A glance at the mixture under the microscope revealed its true nature. In coarse powders it is sometimes possible to recognize the stomata of leaves.

(d.) Pharmacognosia, or the recognition of drugs, is studied by aid of a system based upon the physical characteristic of the substances. As an example, we study the structure and characteristics of a leaf, which is one of the subdivisions of that great class of drugs derived from the vegetable kingdom. Leaves are again subdivided into two kinds, the herbaceous and coriaceous. These two classes are readily distinguished from each other by an examination without the aid of the microscope. However, the case differs when we come to the study of several other subdivisions of vegetable drugs. For instance, we take the roots, which is a subdivision corresponding to the leaves. The roots are divided into two similar subdivisions,
known as the mono-cotyledonous and the di-cotyledonous. It is by means of examining a transverse section of these roots under the microscope that the pharmacist determines to which subdivision they belong. The di-cotyledonous are again subdivided into woody with thick bark, woody with thin bark and fleshy roots. As is readily understood, this classification is based solely upon characteristics revealed by the microscope. To continue with the subdivision one step further, we have the woody roots with thick bark divided into those with oil, resin or latex ducts, and those without oil, resin or latex ducts.

The advantage of such a system of classification is an interesting subject, but does not directly concern us as microscopists. Its consideration usually occupies an entire lecture in the College of Pharmacy.

(e.) The use of the microscope in microchemistry is not advanced as far in pharmacy as the use of the instrument in vegetable histology. The principal reason for this is owing to the difficulty of studying crystallography. A few of the more common salts, like the echinoma alkaloids, have been studied and their microchemical appearances are figured in the dispensatories. I have no doubt that microchemistry applied to pharmacy will be greatly advanced by the active pharmacist of the future.

(f.) The introduction of the compound microscope in the examination of urine is by no means recent. The value of the instrument in this work is so thoroughly recognized that it does not admit of debate. The examination of urine as a part of a pharmacist's work is fast gaining a similar position.

(g.) In conclusion, there are many incidental uses for the compound microscope in a drug store, such as the examination of the smaller insects which infest drugs, the study of molds, which are found in pharmaceutical preparations, and other uses which suggest themselves to pharmacists with an investigating turn of mind.

I hope that this crude outline of the application of microscopy to pharmacy will give the members of the American Society of Microscopists a bird's-eye view of the possibilities and probabilities of the extension of micro-copy among pharmacists. — Meyer Brothers' Druggist.

RECENT WORK WITH ALCOHOL.—In reviewing the evidence concerning the physiological action of alcohol one is much impressed by the very unsatisfactory character of the experiments made to determine the effect upon the nitrogenous metabolism. Chittenden has recently reported a small series of observations made with great care upon dogs, and which may be greeted as a most acceptable addition to our knowledge of the subject. The animals were fed upon a diet of dried meat and milk crackers, whose nitrogen could be exactly determined, and they appear to have been in nitrogenous equilibrium. In each of the three experiments there was a period of some days without alcohol at the beginning and again at the end, the middle series of eight to ten days forming an alcohol period during which the dog received average amounts of 1.9-2.7 c.cm. of absolute alcohol for each kilogram of body weight.

Such experiments would be expected to give very definite results if alcohol have a very pronounced influence on the metabolism. They show that "no very striking specific action upon the general metabolism of protein matter" is caused by such amounts given to dogs. Chittenden thinks that the alcohol must be considered as acting as non-nitrogenous food, and that the nitrogen of the body may be protected and the nitrogenous output somewhat lessened. Two of his series do show such a diminution of the nitrogen in the excreta during the alcohol period. In both of these cases the day which followed the cutting off of the alcohol supply showed a great increase in the nitrogen output, as though, Chittenden thinks, some check had been removed from the metabolism of the proteids. A vigorous enemy of alcohol would probably argue that "effete material" had been retained, but he would find it hard to explain why so little effect is produced if alcohol be as harmful as is usually maintained. One very suggestive point is brought out in these experiments by the observation that the excretion of uric acid is much increased (in one series it was doubled) by the action of the alcohol. Whether this be due to freer excretion or to increased production is not clear, but the point seems worthy of further examination, and may throw light upon the relation of alcohol to the "uric-acid diathesis." In these experiments no distinct diuretic action was observed.

Another contribution to our knowledge of the physiological action of alcohol has been made by Strassmann. He fed young dogs of the same litter liberally and regularly, giving some of them measured quantities of pure or impure spirits. These experiments lasted about seven weeks, when the animals were killed and weighed. As the animals were young (only about two months old), the number rather too small for comparison, and the quantities of alcohol decidedly large, it does not seem prudent to make any inferences from the figures reported. The percentage weight was distinctly greater in the alcohol dogs for liver and kid
neys (muscles and bones not noted), but especially for the fat, which was more than doubled. This line of work deserves to be followed up with great care.

In other experiments, upon man, Strassmann endeavored to determine more accurately the elimination of alcohol by the lungs, not feeling quite satisfied with methods employed by Bodländer, who had found that the lungs carried off 1.6 per cent of the alcohol in dogs while man loses 1.2 per cent in this way. The respiration apparatus of Zuntz was used, with the modification that a flask was attached, the air of which was considered to be a fair sample after the expired air had passed through the apparatus for half an hour, and the amount noted. The alcohol vapor in the flask (containing some 1750 c.cm.) was estimated by the chromic acid method, and the amount calculated for the hour. In this way six experiments were made on three persons, as against Bodländer's three experiments on himself, but with quantities which may be considered to be fairly comparable with those employed by Bodländer. The average amount excreted by the lungs during four hours, after which time the excretion is insignificant, was 5.1 per cent of the quantity of alcohol taken, decidedly more than the 2.0 per cent regained by Bodländer in his expired air. The examination of the urine made by Strassmann in five experiments on two persons determined an average output of 1.7 per cent of the alcohol through the kidney in man, Bodländer's figures being 1.2 per cent; but as the average in one of Strassmann's men is 1.35 per cent, renal peculiarities may be in play. Strassmann agrees with Bodländer that there can be no doubt that by far the greater part of the alcohol is disposed of in the body and not excreted as alcohol; but he thinks that his determination of the amount lost by the lungs and kidneys is more exact, and justifies the conclusion that as much as 10 per cent may be lost, leaving 90 per cent to be made use of in the body, presumably as a "force producer."

It is perhaps worth while to call attention to one point in this investigation, while admitting that the method is in principle an improvement upon that of Bodländer. Strassmann seems to have made but one control experiment to test his method, and he then recovered only 89 per cent of the alcohol which had evaporated from his mixture. Since the method itself multiplies any error in the determination by about 250, and since the determination depends upon color comparisons, it is hard to say how much exactness may be credited to the observations. It may also be fairly urged that the respiratory movements, while not affecting the oxygen and carbon dioxide whose proportions are dependent upon the tissue respiration, are sufficiently altered to render the excretion of the alcohol by the lungs greater than it would be normally. Some of the irregularities in Strassmann's tables strongly suggest this, and one experiment with forced resiratory movements, by which the exhalation of the alcohol seems to have been markedly increased, although not conclusive, points in the same direction.

In another series of experiments made in the same laboratory, the influence of alcohol upon the digestion was incidentally examined. It was found that sixty grams of alcohol had no deleterious influence upon the digestive powers of a man accustomed to take that quantity, as compared with the digestion of a similar diet in another man using no alcohol. — Boston Medical and Surgical Journal.

The Action of the Constant Current upon the Uterus. — (Zeitschrift für Geburt, und Gynäkol., Band xxii. Heft 1, 1891.) Experiments were made upon fourteen uteri, seven living, in cases in which total extirpation of the uterus was about to be performed, and seven upon uteri removed from the cadaver. Platinum, carbon, and copper sounds were used, and over the abdomen the Apostoli electrode was placed. Upon the uteri which had been removed, a plate electrode, made of tin and covered with cotton, was applied over the fundus. The strength of the current varied from seventy-five to three hundred milliamperes, and the duration six to ten minutes on the living and ten to fifteen on the dead. In all of the cases generation of gas was manifested, as evinced by a distinct sound and the exit of foamy fluid from the os externum. When the anode was placed intra-uterine a distinct odor of chlorine became evident.

The action of the constant current was always found to be that of a caustic, varying in quantity according to the strength of the current and the length of time applied; varying also in quality according to whether the cathode or anode was applied, and also depending on the kind of sound employed. The action of the anode is like that of an acid; of the cathode, that of an alkali. The platinum sound always caused the most marked effect when acting as the anode, then came the carbon, while the copper sound produced the least effect. The same was observed when these sounds were made the cathodes. The action upon both the living and dead uterus was always a destruction of the superficial layer and the production of coagulation of blood and lymph in the tissues more deeply situated. They summarize the results of experiments as follows:
1. The action of the galvanic current when applied intra-uterine causes a coagulation necrosis.
2. The intensity and duration being the same, the anode acts more strongly than the cathode.

**Diuretin (Knoll) in Infantile Practice.** According to the recent observations of Dr. R. Demme, Professor of Pediatrics to the Faculty of Medicine of Berne, diuretin may be administered in the daily dose of .50 to 1.50 grams (7/8 to 22 grams) to children of two to five years old, and in daily doses of 22 to 45 grams in children of six to ten years. In infants less than a year old the drug is contra-indicated, as it easily provokes gastro-intestinal irritation in these young patients.

Care should be taken in prescribing diuretin, as it is liable to be decomposed by certain substances. Dr. Demme recommends the following:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diuretin</td>
<td>gr. xxij</td>
</tr>
<tr>
<td>Distilled water</td>
<td>7/8 iij</td>
</tr>
<tr>
<td>Brandy</td>
<td>gtt. x</td>
</tr>
<tr>
<td>Sugar</td>
<td>grs. xl</td>
</tr>
</tbody>
</table>

M. Sig: To be taken in the course of the twenty-four hours in doses of one tablespoon.

Dr. Demme's observations have convinced him that diuretin is a good diuretic for children, except for the most part of all unpleasant influences, and probably acting on the renal epithelium.

Under the influence of diuretin the dropsy of scarlatinal nephritis disappeared more quickly than by the action of any other medication. It suppresses very rapidly the anasarca and serious effusions in cases of mitral disease, when the compensation has been previously established by means of digitalis.

The diuretin was generally well supported, and it had no cumulative action. However, in one case of generalized dropsy in a child of ten years, suffering from amyloid degeneration of the liver, spleen, and kidney, Dr. Demme has seen a morbilliform eruption with abundant diarrhea, after the injection of 90 grams of diuretin in the space of four days. — La Semaine Medicale, Feb. 24, 1892.

**On Taking Fluid with Meals.** — A great deal of misapprehension is often found to exist in the popular mind in regard to matters of eating and drinking. The cause of this to some extent is to be traced to old-time sayings which have come down to us in the form of a concentrated infusion of somebody's opinion upon a subject of which he or she was woefully ignorant. One of these misapprehensions to which we may refer is as to the injuriousness of taking fluid with meals. One frequently hears it laid down as a maxim that "it is bad to drink with your meals; it dilutes the gastric juice." By way of explanation we may remark that "it implies that the fluid taken is harmful." Whence this sagacious postulate originally came we can not tell. It has quite the ring about it of an inconsequent deduction formed by a person whose presumption of knowledge was only exceeded by a lamentable ignorance of the subject. Medical men often find much difficulty in dealing with these museum specimens of antiquated science, for even educated persons are disposed to cling to the absurdities of their youth.

Upon this matter Mr. Hutchinson remarks in the last number of his Archives: "I observe with pleasure that the verdict of general experience and common sense has been confirmed by scientific experiment in the matter of taking fluid with meals." Dr. Tev. O. Stratievsky, of St. Petersburg, after elaborate trials, has found that fluids materially assist the assimilation of proteins, and announces the following conclusion, which it is to be hoped no future experiments will controvert: "On the whole, the widely spread custom of taking fluids during or just before one's meals proves to be rational and fully justified on strict scientific grounds. To take fluids with the meals is almost as important an adjunct to digestion as is the mastication of solid food preparatory to swallowing it." It is obvious, however, that there is a limit to the amount of fluid one can swallow with impunity—not to speak of comfort—just as much with meals as at other times. It would be dangerous to create a general impression that fluid is good with food irrespective of quantity. It is, moreover, a well-ascertained clinical fact that an excess of umbranthal fluid does retard digestion in certain people, and gives rise to discomfort in most. A little attention to one's sensation in such matters will far better fix the desirable limit than all the "data" in the world. — Medical Press and Circular.

**Etiology of Hyperemesis Gravidarum.** Keil (Münch. Med. Woch., October 13, 1891) records a case in support of Kaltenbach's view, that the vomiting of pregnancy is, in the absence of any pathological cause, not infrequently hysterical in character, and to be treated as such. His patient, aged twenty-six, although a sensitive, irritable woman, had never shown
definite symptoms of hysteria. Soon after marriage severe morning sickness set in, without any local causative condition, and unaffected by the usual remedies. Rapid emaciation and debility followed, with fainting attacks, almost every meal being rejected soon after it had been swallowed. On examining his patient with the idea that she might be suffering from hysteria, Keil found conclusive evidence. The ovaries were tender; there was partial anesthesia of the left arm; pressure over the sensitive second rib caused deglutition movements and coughing, all of which satisfied him that the vomiting was hysterical. The treatment adopted was by suggestion, the patient being told that a newly discovered unfailling remedy (ingluvin) would be given her, and that by washing out the stomach the source of her trouble would be removed, by dieting her on ice and milk, and by isolating her from her relatives. These means proved entirely successful; the vomiting ceased, her general condition improved, and she gained considerably in weight. The symptoms and the results of treatment alike proved the hysterical nature of the vomiting, which had evidently broken out during pregnancy in a woman who was disposed to neuroses.—British Medical Journal.

The Influence of Obesity on the Female Sexual Functions.—Dr. Juan Maria Rodriguez writes on the influence, in Mexico, of obesity on menstruation, conception, pregnancy, childbirth, and the puerperium. Fat women are generally irregular in their functions. Menorrhagia is rare; dysmenorrhea is common; so is amenorrhea, simple and exfoliative. Amenorrhea and dysmenorrhea often alternate. Temporary suspension of the menses is often mistaken for pregnancy, aided by desire and imagination, which latter the author calls 'a crazy woman residing in the brain of every one who thinks.' Obesity is often a cause of sterility by producing fatty degeneration and atrophy of the ovaries and uterus. Obesity may favor miscarriage through compression and disturbance of the circulation. It may be a cause of prolonged and difficult childbirth, by impairing the tonicity and contractility of the muscles, and retarding likewise the expulsion of afterbirth, and necesitating bandaging and compression of the stomach after its expulsion. Fat women are considered to be bad wet-nurses.

Obesity is a complaint of rich women. Behier told one of his rich clients, who complained of obesity, to live on three frames, but to earn them by her own work.

In the treatment of obesity amylaceous food should be abandoned; exercise and steam baths are useful. Sterility caused by obesity may be relieved by removing the cause.—Gaceta Med. de Mexico.

Therapy in Albuminuria and Nephritis of Pregnancy.—(Der Friseur, Heft 8, 1891.) Prophylaxis aids us but little in preventing this unfortunate occurrence. We can recommend frequent warm baths, the wearing of woollen underwear, and prevention of all forms of excitement. If a chronic nephritis exists, the danger to the mother becomes so great (statistics show a mortality of eighty-four per cent) that the induction of premature labor is demanded. If an occasional albuminuria occurs during pregnancy, no treatment need be adopted besides unusual care and vigilance; but where a nephritis exists, patient should be placed upon a strict milk diet. This often effects wonders; the quantity of urine becomes increased, the albumen disappears, and eclampsia does not occur. If symptoms arise, warm baths and subcutaneous injections of pilocarpine do good. Gramm and Schröder recommend the employment of the salicylate of theobromide (diuretin). Mynlieff believes that if a nephritis occurs in the early months of pregnancy in a previously healthy woman, the induction of premature labor is indicated. When, however, it appears in the sixth or seventh month, then interference with the gestation is contra-indicated, except when very serious symptoms develop, such as hydrops, dyspnea, etc.—Dr. Mynlieff, in The American Journal of Obstetrics.

Hypodermic Injections of Corrosive Sublimate in Diphtheria and Scarletina.—Dr. J. Jacontini (Morgagni, 1890) administered by injections one centigram of corrosive sublimate in eight or nine days during an epidemic of scarlatina. The fever was reduced, and at the same time the manifestations in the throat were modified. Encouraged by these results, the author used this treatment in two cases of diphtheria, with the satisfaction of obtaining a rapid attenuation of the morbid phenomena and followed by cure.

Influence of Antipyrin on the Secretion of Milk.—Dr. Guibert writes in the Lyon Médical, that antipyrin renders marked service in cases where it is necessary to arrest the secretion of milk from newly-delivered females, provided the kidneys be normal. He states that generally it suffices to administer thirty grains of antipyrin daily for two days, in order to obtain the desired effect. He gives the remedy in capsules of four grains each, one to be taken every two hours.
INCREASED POSTAL RESTRICTIONS.

A bill has been introduced into Congress imposing further restrictions in regard to sending obscene literature and dishonest advertisements through the mails. This is meeting with some opposition on the ground that it is a move in the direction of centralization. To our mind the greatest argument in favor of the preservation of the rights of the States is the fact that in so large a country, with its great diversity of climate, pursuits, and interests, just government would be impossible, unless each State were allowed to look after its own interests.

But with the highest appreciation of the doctrine of State's rights, we fail to see the harm that would offset the great good to result from withdrawing the aid of mail facilities from the host of swindles the people of this country have suffered from so much and so long. There may be extreme and oppressive features in the bill that need to be eliminated, but as far as its application relates to matters medical, these faults must be great to overbalance the promised good.

The men who advertise lots in phantom cities, or counterfeit money on easy terms, and like enterprises, are already prohibited the mails. It would certainly then be an equitable extension of the law that would prohibit the use of the mails to men who advertise medicines to produce abortion, or who send out pamphlets on "lost manhood," or pretended remedies for opium habitues. Even the religious press often contains such advertisements, which are only intended to rob and plunder the ignorant and the unsuspecting. It does not help the matter in the least that this vile class of men, instead of using the mails with their own circulars, pay for advertisements in the newspapers and periodicals, and thus find an easy entrance into the families of their victims.

It is neither in the interest of political liberty, justice, or good morals, that a public institution like the postal service should be maintained by the public and allowed to be made the medium through which the vilest class of the community may swindle the most helpless and trusting; for the sick, like the drowning, ready to catch at every straw, are indeed the most helpless. Let the restriction by all means be provided and enforced.

THE WAR AGAINST IRREGULARS.

The war against quackery in Louisville is just now being vigorously pursued by the State Board of Health through its able secretary. Some notorious quacks have been forced to quit the field, and it is only a question of time when the city, as well as the State, will be purged of these getters of money under false pretenses. Of course, certain irregulars who have for many years plied their trade will be hard to dislodge, and it may be possible that new legislation under the new Constitution will be required before we are absolutely ridden of the pest; but it goes without the saying that the days of quackery in this State are numbered, and the next decade will write the epitaph of the last quack out of the profession in the Commonwealth. When these are ousted, will the State Board turn its attention to the quacks in the profession?

SALT-WATER (½ teaspoonful to the quart), by rectal injection, has been recommended in severe acute anemia, for instance, from great loss of blood intra partum.—Merck's Bulletin.
Notes and Queries.

INTERNATIONAL PERIODICAL CONGRESS OF GYNECOLOGY AND OBSTETRICS.—The Belgian Society of Gynecology and Obstetrics, under the patronage of the Belgian Government, has taken the initiative in organizing "The International Periodical Congress of Gynecology and Obstetrics," the first session of which will be held in Brussels, September 14th to 19th inclusive, 1892. Three leading questions will be offered for discussion:

1. Pelvic Suppurations; Referee, Dr. Paul Segond, Paris.
2. Extra-Uterine Pregnancy; Referee, Dr. A. Martin, Berlin.
3. Placenta Previa; Referee, Dr. Berry Hart, Edinburgh.

Fees: Members participating in first session, 30 francs. (This will entitle the holder to a copy of the proceedings of the Congress.)

Founders (Life Membership), 300 francs.

In connection with the Congress there will be an International Exposition of instruments and appliances pertaining to Gynecology and Obstetrics.

All communications pertaining to this Congress should be mailed direct to the American Secretary, who will promptly furnish all information. All notifications to be forwarded should be received by August 1st.

Every thing points to great success in this Congress. Though notices concerning it have been rather late in this country, already men of celebrity have promised to visit and contribute papers. Among the many foreigners who have written to the Secretary General, indorsing and promising support to the undertaking, may be mentioned the following eminent men:

Belgium: De Roubais, Sacre, Mirriar, Pigeolot, Charles, Sampaie, and others.

Italy: Porro, La Torre, Mangiazalli, Bozzi, Morisain.

Turkey: Chatazian.

France: Pean, Demons, Fochier, Auvard, Doleris, Pozzi, Tarnier, Budin, Terrillou, Terrier, and others.

Holland: Stokvis, Treub, Nyhoff.


Austria: Pawlik, Albert, Chrobuk.

Germany: Martin, Leopold, Sanger, Gusserow, Winckel, Hegar, Kaltenbach, Freund, Veit, Heyder, and others.

Finland: Engstrom, Heinricius, Pippinhold.

Switzerland: Reverdin, Vuillet.

Russia: Slaviansky.

Sweden: Saliss, Westernark.

Norway: Staffeldt, Howitz, Meyer.

Further details will be furnished as soon as received.

Dr. F. Henhoten,
333 La Salle Ave., Chicago.
American Secretary.

Editors American Practitioner and News:

Diagnos-is and Treatment Wanted.—On the morning of January 10th I was called to attend Mrs. K., who was in labor with her second child. She had been confined some two years previous, as the family informed me, and had a very serious time, the child having to be delivered with forceps. On examination I found os dilated to the extent of a silver dollar, pains occurring every ten minutes, but seemingly doing no good. After some three hours the patient was very much discouraged, begging me to administer chloroform and apply the forceps. After waiting some two hours, and seeing that nature could not perform her functions, I applied the forceps and delivered her of a child, seemingly asphyxiated. I went to work at once with restoratives, and in the course of half an hour had it crying lustily. Now, the point I am leading to is this: I noticed in working with the child that it had no use of the left arm and forearm, nor has it used the arm up to this date. I supposed at first that there was a fracture or dislocation, but on careful examination failed to find anything of that nature whatever.

There was at the time of birth a small bruise on top of the shoulder, but no swelling. Arm can be flexed and bent in any of the normal positions, but when the forearm is flexed or carried up to the head or breast it falls back passive. There is no difference in length by measurement of the two arms. It seems to be somewhat smaller in the region of the deltoid.
and biceps muscles; that, I think, being due to non-development of the muscles by use. The query is this: Is the inactivity of the member due to a dislocation or fracture, or is it an injury to a nerve? I would like to have the editor's views on the case, diagnosis and treatment of the same. Would also like to hear from the brother M. D.'s through The American Practitioner and News.

PHILLIPS, N. C.
C. D. HUSTEAD, M. D.

MARINE HOSPITAL SERVICE.—A board of officers will be convened in Washington, May 2, 1892, for the purpose of examining applicants for admission to the grade of Assistant Surgeon in the U. S. Marine Hospital Service.

Candidates must be between twenty-one and thirty years of age, graduates of a respectable medical college, and must furnish testimonials from responsible persons as to character.

The following is the usual order of the examination: (1) Physical, (2) Written, (3) Oral, (4) Clinical.

In addition to the physical examination, candidates are required to certify that they believe themselves free from any ailment which would disqualify for service in any climate.

The examinations are chiefly in writing, and begin with a short autobiography by the candidate. The remainder of the written exercise consists in examination on the various branches of medicine, surgery and hygiene.

The oral examination includes subjects of preliminary education, history, literature, and natural sciences.

The clinical examination is conducted at a hospital, and when practicable candidates are required to perform surgical operations on the cadaver.

Successful candidates will be numbered according to their attainments on examination, and will be commissioned in the same order, as vacancies occur.

Upon appointment the young officers are as a rule first assigned to duty at one of the large marine hospitals, as at Boston, New York, New Orleans, Chicago, or San Francisco.

After four years' service Assistant Surgeons are entitled to examination for promotion to the grade of Passed Assistant Surgeon.

Promotion to the grade of Surgeon is made according to seniority and after due examination as vacancies occur in that grade. Assistant Surgeons receive sixteen hundred dollars, Passed Assistant Surgeons eighteen hundred dollars, and Surgeons twenty-five hundred dollars a year. When quarters are not provided, commutation at the rate of thirty, forty or fifty dollars a month, according to grade, is allowed.

All grades above that of Assistant Surgeon receive longevity pay, ten per centum in addition to the regular salary for every five years' service up to forty per centum after twenty years' service.

The tenure of office is permanent. Officers traveling under orders are allowed actual expenses. For further information or for invitation to appear before the Board of Examiners address

WALTER WYMAN,
Superintendent General, M. H. S.
WASHINGTON, D. C., Feb. 23, 1892.

NEW BUILDINGS FOR JEFFERSON MEDICAL COLLEGE OF PHILADELPHIA.—The Board of Trustees and the Faculty of the Jefferson Medical College have just completed the purchase of two large lots on Broad Street, giving them frontage of about 300 feet and a depth of 150 feet, upon which they will proceed to erect at once a handsome hospital, lecture hall, and laboratory building. The estimated cost of the buildings is $500,000. The hospital will be built not only as a suitable building in which to care for the sick and injured, but also will be provided with a large amphitheater for clinical lectures. The basement of the hospital building will be given over to various dispensaries, each of which will be provided with large waiting and physicians' rooms as well as rooms for direct teaching of students. All the buildings will be absolutely fire-proof and provided with patent sprinklers in case their contents catch fire. By the erection of three commodious buildings, the laboratories where delicate work with the microscope or apparatus is carried on will be separated from the college hall where didactic lectures are given, and so will be free from any jarring produced by the movements of large classes. With the hospital on one side affording clinical facilities, and the laboratory on the other side of the college hall
for scientific research and training, the college will be most favorably situated for giving thorough instructions in medicine. Further than this, immediately across the street is the Howard Hospital, and on the adjoining corner the Ridgway Branch of the Philadelphia Free Library, which contains all the scientific works belonging to this wealthy corporation. The new site is even more favorably situated in regard to the center of the city than the old one at Tenth and Sansom streets. The move has been rendered necessary by the large number of students who are now being instructed in this institution, and because the faculty desire to keep the school and hospital in the foremost rank of medical education in this country.

The buildings will be ready for occupancy in the sessions of 1893 and 1894.

A Higher Professional Standard.—Much has been said of late as to the necessity of elevating the standard of medical education. The work and results of medical colleges have been scrutinized and criticised and laws passed and reformation advocated to raise the average college course and regulate the routine of study.

All this is very well, and we are glad indeed that the best medical colleges in the land have responded to the demand. Our young men will be better fitted for their work, and the increased difficulty of entering the profession will prevent the old men from being crowded out by the great army of new-comers.

To stop short at the medical colleges, however, is far from right. When we see growing tendencies to loose and irregular practice among those who know better, and the strife and jealousy which so often exist among men whose education and work should make them brothers, we feel that there is an equal demand for a higher professional standard among those who are practicing medicine, as among those who are at the threshold as students.

We have heard a man insist upon a higher grade course of study for students and closer examinations for graduates, while it was an open secret that his own methods were questionable and his personal character rotten. Indeed, it is often such fellows who make most noise, and, as a consequence, excite the most disgust. Let the work of reformation which has begun in our schools be carried on in the profession until our ranks are free from those who disgrace themselves and all connected with them. There are enough of honest, right-minded men in the profession to freeze out or reform all these fellows—half doctors and half quacks. What we need is a recognition of a man's true standard, and the courage to treat him according to our convictions and his deserts.—St. Louis Clinique.

Two Methods.—To a physician of Philadelphia, widely known and greatly honored, an enterprising firm of dealers in wine lately sent a most lavish and costly case of "samples" of their "medicinal" beverages. The enterprising firm was thanked, and politely informed that the present had been re-presented to Hospital.

Another physician writes an effusive and laudatory letter in praise of the wine, as regards its prophylactic and curative properties in disease, and this letter will doubtless be poked under the nose of every one of us for years to come.

In certifying to the superior excellences of one special preparation, it goes without saying that as a scientific man the physician has made impartial scientific analysis and tests of all competing preparations of the kind, and chemically, physiologically, and therapeutically is disinterestedly certain that the one he pronounces the best is really so. If he has not done so his certificate is a farce and he has unjustly discriminated against other preparations, possibly equally as good, the makers of which trust to the qualities of the preparation rather than to sly advertising dodges. But whatever the fact, either he has been foolish enough to give a valuable thing for nothing, or he has had value received for the puff.—Medical News.

Prof. Wood's Testimony in the Harris Case.—Prof. Horatio C. Wood made a personal statement at the last meeting of the College of Physicians, which calls attention to a remarkable and too prevalent abuse of privilege. In a recent trial in a New York City
Court (the Harris case), Prof. Wood was called upon to testify as an expert on opium-poisoning. When he read the report of his testimony in the New York papers the next morning, he found statements attributed to him which to his mind could only be explained on the theory that he was mentally irresponsible at the time of making them. He was very much concerned about the matter, and immediately returned to New York to see if it was too late to have the testimony re-opened, so as to make his testimony read as he had intended to make it. Upon reaching the office of counsel he asked to see the official stenographic report, in which he found his replies, to hypothetical and scientific questions, perfectly correctly recorded. He arrived at the conclusion that the reporter who had written the account of the trial, was not present in court when his testimony was given, and wrote a fictitious and misleading statement. What Dr. Wood did state is as follows:

"The positive diagnosis of opium-poisoning from the symptoms alone is often impossible. In the Harris case, the symptoms as embodied in the hypothetical question were so loosely observed that many symptoms essential to the diagnosis are omitted, and to this is added the fact that the early development of complete coma, as recorded, is conformable to natural diseases, and is extremely rare, if it ever be present, in opium-poisoning. It seems to me that the cause of death, so far as the medical testimony is concerned, is enshrined in an impenetrable mystery."—Boston Med. and Surg. Jour.

The Action of Parasitical Plants on their Hosts. — At a recent meeting of the Academie des Sciences, M. Chapin, speaking on the subject, said that all parasitical plants seriously modify the sap of their hosts, totally eliminating some elements, and on the other hand producing other new ones. He cited as examples the loranthus grown on strychnos nauseomica, in which no strychnine is found; botanophora grown on cinchona, in which no quinine is found; and in the oak mistletoe green instead of blue tannin is found. On the other hand, substances are found in parasites which do not exist in the trees upon which they are found. Thus, mistletoe contains lime, and the dodder produces yellow and red coloring matters. In the broom-rape of hemp and milfoil a blue color is found; in that of the horseshoe vetch, a rich sulphur tint; and in the broom-rape of thyme, an amethyst shade. The mistletoe and most other parasites contain fecula, which penetrates to the fiber of the wood. In short, all these matters are formed by the parasitical plants themselves.

shall Clergymen Pay the Physician for Services? — This question has come up for discussion, based upon the bill of a Brooklyn physician made against the estate of a Catholic priest for services rendered. The heirs protested on the ground that it was usual for physicians to make no charges under the circumstances. There is no reason why this should be so, however, as was very properly stated by a priest in voluntarily answering the question in a letter to one of the newspapers. We entirely agree with the latter assertion, and that, save in a very few exceptional cases, charges should always be made. The physician pays the priest for the marriage ceremony, for christening, and his heirs are expected to be ready with an honorarium when mass is said at the funeral of the doctor, when his many deeds of charity are over. Nor does the physician enjoy a free pew in the church of his choice on the score of helping the deserving poor of the congregation. As a mere matter of advertisement for practice it seldom if ever pays, as the clergyman in many cases chooses a physician for himself, but for policy sake does not care to recommend one doctor more than another for members of his flock. But more than all, the services to the priest or minister are valued in proportion to the amount actually paid for them.—Medical Record.

Linear Craniectomy for Microcephalus. The Journal of Nervous and Mental Diseases, October, 1891, contains a report of a case in which Dr. J. C. McClintock performed this operation. The patient was three and a half years old, idiotic, and could scarcely raise her hands or feet; she never had been able to sit up. The head was very narrow; the frontal
region showed great arrest of development. Protrusion of the right eyeball seemed to be a partially compensatory effect of the intracranial pressure. A strip of bone about one inch wide was removed from each side of the head, extending from the posterior superior angle of the parietal bone to just above the superciliary ridge, leaving a bridge of bone about three fourths inch wide over the superior longitudinal sinus. Recovery from the operation took place in little more than a week. Marked improvement resulted; the child became quieter, exercised her limbs, raised her body, and exhibited a wish to join in play with other children.—Supplement to British Medical Journal.

Poisoned Wall-paper a Humbug.—Prof. Chandler's discourse at the Academy, at its last anniversary, was a sharp arraignment of Boston doctors. It is not often that one of the spokes turns on the hub in this way. It is well for the peace between the two cities that the castigation did not come from a genuine M. D. For while Prof. Chandler is a member of a medical faculty, and once received the honorary degree of M. D., he seems never to have used it, and to always speak of himself as a layman when among doctors. He is enough of a doctor to weigh medical evidence very accurately, and to know the true value of subjective symptoms. Dr. Chandler says that the arsenical poisoning idea in Boston is a fad, and with the late Dr. John C. Dalton, himself a native of Massachusetts, he believes that the whole idea of anybody's being poisoned from wall-paper is a humbug.—The Post-Graduate.

The Bread of the Famine Districts in Russia.—The Lancet has obtained possession of a specimen of the relief bread furnished by the Russian Government to the starving peasants in the Province of Nizhni-Novgorod, and has had it analyzed. The result shows the addition, in round figures, of not less, and probably more, than ten pounds of foreign substance to every hundred weight of rye flour, including woody fiber and husks, leafy matter and seeds, and containing silica and sand to the extent of more than two per cent. This makes the flour heavier and also increases its bulk. The bread is described as of a dirty brown color, looking like coarse peat. Many persons to whom it was shown failed to recognize that it was bread at all. A Russian, writing from Nizhni-Novgorod, says: "I found in many cases that this so-called bread contained no rye flour whatever, but was composed of wild arrack, potatoes, chaff, and leaves." The daily allowance of this so-called bread judged sufficient to keep the life in a healthy adult is something less than one pound.

The Khedive's Death.—The British Medical Journal has received a series of documents bearing upon the last illness of the late Khedive of Egypt. To publish them, it says, or even an analysis of them, would renew the most painful impressions. It is impossible, in the light of all the facts, not to arrive at the conclusion that Tewfik's death was hastened by the untimely administration of morphine. "The whole story is an illustration of the lamentable influence of the harem in bringing about the selection of native physicians, and their control of access to the patient, skill and experience of European physicians being thereby set at naught."

Tetanus Cured with the Tetanus Antitoxine.—In the Centralblatt für Bakteriologie und Parasitenkunde for December 22d, Dr. Rudolf Schwarz, assistant at the surgical clinic at Padua, gives the history of a case of traumatic tetanus, in a boy fifteen years old, cured by injections of the antitossina del tetano prepared by Tizzoni and Cattani from the blood serum of animals rendered proof against tetanus. He refers to another case treated by Gagliardi, and in a postscript to two others treated by Pacini and Nicoladoni respectively. Tizzoni and Cattani's process is not given by Dr. Schwarz, but it is probably to be found described in their contributions to the Riforma Medica during the year 1891.

The New-born Child of a Female Opium Victim Dies for Need of Opium.—"Literature, however, shows that when the female opium victim brings forth a child, such off-
spring is prone within forty-eight hours to die of an apparently causeless collapse. The real cause of such collapse is, however, the need of opium. The child in the first few hours finds itself not only struggling with the new conditions of life, but also totally deprived of its nerve stimulant, and it dies when its life might have been saved by doses of laudanum perhaps sufficiently large to kill an ordinary infant."—H. C. Wood, in A System of Practical Therapeutics.

Dissecting Rooms for "The Outside Man."—Our vigorous young contemporary, the New York Journal of Gynecology and Obstetrics, calls for the renewal of an enterprise once successfully undertaken by the Brooklyn Surgical Society, that of establishing and maintaining rooms where anatomical study may be prosecuted without the necessity of one's enrolling himself as a pupil in any school. The opportunities at the schools and hospitals, says the Journal, are excellent, but confined to a favored few. "Give the outside man a chance," it adds. The idea is certainly praiseworthy, and we hope it may be realized.

The Tomato the Apple of Longevity.—Dr. Siccar, a Portuguese Jew, settled in Virginia in the last century (Thacher), introduced that "admirable vegetable the tomato. He was of the opinion that a person who should eat a sufficient abundance of these apples would never die. Whether he followed his own prescription is not known, but he certainly attained an old age, and particularly for the climate in which he lived. The tomato is raised in abundance in Virginia and the adjoining States, and is regarded a great luxury, and by some is considered a preservative against biliousness."

Pental, a New Anesthetic.—Pental, \(C_5H_{10}O\), is a clear, colorless, thin, neutral fluid with a peculiar sweetish odor and taste. Merig, according to the Centralblatt für die gasamme Therapie, finds that it has a distinct anesthetic action without unpleasant after-effects. It has no appreciable influence on the pulse or respiration. It is easy of administration, patients coming under its influence in about four minutes without any of the unpleasant sensations produced by either chloroform or ether. For operations taking only a few minutes to perform, the author thinks that this new anesthetic will fill all requirements.

The Action of Chloroform on Bacteria. The Centralblatt für die gasamme Therapie for December, 1891, contains an interesting article by Von Kirchner on this subject. He has found that chloroform renders the spores of the anthrax, cholera, and typhus bacilli incapable of germinating, and that pus germs are rapidly destroyed by this agent. He thinks that this fact can be put to practical use in the treatment of these diseases, considering the diffusibility of the substance and its appearance in the stools and urine after its administration.

Hyoscyamine in Lettuce.—According to the Lancet, Mr. T. S. Dymond recently read a paper before the Chemical Society in which he stated that he had found in the presence of hyoscyamine an explanation of the mydriatic action of extract of lettuce. The alkaloid was found in several varieties of the plant, in amounts varying from 0.001 to 0.02 per cent.

The Bacillus of Influenza.—It is stated in the cable reports from Germany that Dr. Pfeiffer has discovered the bacillus of influenza, and has verified his discovery by inoculation experiments in six cases. It has been found both in the sputum and in the blood.

Physicians for Jewish Colonies.—An advertisement appears in the German journals asking for volunteers among Jewish physicians to take charge of medical affairs in the Jewish colonies which have been established in South America. Applicants must sign a contract for three years' service, they must speak German and have had hospital service. Those who can speak the Russian-Polish dialect are preferred.

An ounce of camphor dissolved in three ounces of turpentine has been used in Columbia Hospital for Women to check secretion of milk in mastitis. It relieves pain, diminishes induration, and reduces inflammation. Care
should be taken that the part should not be so tightly covered that the application shall produce irritation of the surface.—*Medical and Surgical Reporter.*

**Proprietary Remedies.—** Thirty years ago Great Britain derived from patent medicines a revenue of $210,000. The same tax now yields $98,500,000 a year. All this increase is at the expense of the gulled public, the honest apothecary and the doctor being large losers.—*North Carolina Medical Journal.*

**Typhoid Fever Treated by Yeast.—** Dr. M. B. Thompson, in a recent number of an Australian contemporary, records some notes of the treatment of cases of typhoid by yeast. In all thirty-seven cases were so treated. Ten were severe, the temperature reaching or exceeding 104°; eight moderately severe, temperature reaching or exceeding 103°; eleven were mild, although the temperature reached 103°; eight were very mild, the temperature never being above 102°. In all recovery took place without any relapse. This point is worthy of note, inasmuch as, according to Fagge, the average proportion of relapses is from two to eleven per cent.—*Medical Press.*

H. J. W. Martin, M. R. C. S. and L. S. A., Hounslow, Middlesex, England, says: I have used S. H. Kennedy's Extract of Pinus Canaden-is in an obstinate case of gleet, that had existed for some six months before coming to my notice, with marked success, a vast improvement taking place after using one bottle of injection, and before the third bottle was finished a cure was effected which was permanent.

**Nervous Anæmia.—**

Syr. hypophos. comp. ..................... 4 oz;

Celerina [Rbo] ..................... 4 oz. M.

Sig: Teaspoonful three times a day.

**Chicago Scotchmen have announced their intention to commemorate their immortal poet by building the Burns free hospital.**

**Prof. W. T. Briggs, of Nashville, Tenn., has fully recovered from a recent severe illness.**

**Army and Navy Medical Intelligence.**

**Official List of the Changes of stations and duties of medical officers of the United States Marine Hospital Service for the three weeks ended February 27, 1892.**

**Purvis, George, surgeon;** Detailed as Chairman Board of Examiners, February 20, 1892.

**Hamilton, J. B., surgeon;** Detailed for special duty February 18, 1892.

**Stoner, G. W., surgeon;** Detailed as member Board of Examiners, February 20, 1892.

**Irwin, Fairfax, surgeon;** Ordered to Norfolk, Va., for temporary duty, February 16, 1892. Granted leave of absence for seven days, February 24, 1892.

**Carter, H. R., surgeon;** Detailed as recorder Board of Examiners, February 20, 1892.

**Wheeler, W. A.,** passed assistant surgeon: Ordered to examination for promotion. February 16, 1892.

**Vanghan, G. T.,** passed assistant surgeon: Detailed as executive officer, Supervising Surgeon-General's Office, February 27, 1892.

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**SPECIAL NOTICES.**

My experience with Terraline is, that it is the most valuable of this class of remedies for lung troubles of a chronic character. It is unmistakably a great medicine. T. Crew Worthington, M. D.

**No. 80 West Fayette St., Baltimore, Md.**

Since I first became acquainted with Terraline (about two years ago) I have used it very extensively and with most satisfactory results. As a remedy for the cough of Phthisis, both in early and late stages, I know of nothing equal to it. Combined with cresote (one drop to a teaspoonful) it is extremely valuable, since, in this way, we can add to its own nutritive and soothing properties the antiseptic virtues of the latter drug.

J. Ewen Michael, M. D.

**No. 957 Madison Avenue, Baltimore, Md.**

"**INGLEVIX.**—W. R. Warner & Co., Philadelphia, Pa., desire to send to any physician a sample of this remedy, wherever they have a patient resisting all other treatment, for sickness in Gesta-tion, Marasmus, cholera infantum, for which it has been found to be almost a specific."

**Dr. C. S. Robinson, Richford, Tiago county, N. Y., says: I have tried Papine (Battle & Co.), and I find it possesses the medicinal virtues of opium, unalloyed with the drawbacks following the use of other forms of the drug. I tested Papine in my own case, having used many forms of opium during forty years, but only in acute attacks. It is not harmful, like crude opium, morphine, and other preparations, in delicate or irritable stomachs; on the contrary, it is acceptable as cordial. Also, the head is not made ill as it is by the other forms of opium that have come under my observation during most half a century. Papine is more prompt than morphine, except when the latter is used hypodermically. My wife has acute rheumatic attacks, and so-called 'sick-headaches,' and long ago decided she was unable to bear morphine or opium treatment. On hearing me extol Papine, she tried it unknown to me, and afterward reported, saying, 'I believe it is indeed a good remedy, I can take it, for it does not make me sicker when I am sick.'"
Original Articles.

TEMPERAMENT.

The Doctorate Address to the Students of the Graduating Class of the Medical Department of the University of Louisville. Session 1891-92.

By D. W. Yandell, M. D.
Professor of Clinical Surgery in the University.

"The proper study of mankind is man." Whether this maxim be true or not as to the race, it is certainly true when applied to our profession. In all ages men have manifested the same unquenchable desire to know themselves. "To see ourselves as others see us" is a rare gift; but it is nevertheless one which we never cease to invoke and always believe to be near. The most popular book is that which treats, not of abstract truth, but of the doings of men. The poem which lives in all hearts for all time is the poem which paints the passions, the sufferings, the joys, the trials, and the achievements of men. Homer and Virgil, who sing of wars and warriors, come home to our bosoms and our sympathies. They are of the earth earthy, like the peoples among whom they mingled. Milton, who discourses of the deeds of devils and archangels, soars into the clear, cold, upper air, which common people seldom reach, and never breathe with comfort.

"I am a man, and think nothing foreign to me which pertains to humanity." This is the magic key which unlocks all human hearts; whether it be in the hands of the gentle Goldsmith, breathing in tender strains the sorrows and wrongs of his oppressed villagers, or of Byron, the prince of egoists, baring his lordly bosom to the world and making all women his confidantes, and all men his father-confessors.

The materialist studies man in his corporeal workmanship. He sees him composed of muscles, bones, nerves, glands, brain, blood, and vessels. The psychologist questions man's mental construction—the immaterial part. From the time when Plato reasoned of immortality till to-day, when psychic science gives its almost certain demonstration, philosopher, poet, and divine have never weared in the search.

The whilom phrenologist took the middle course. He trusted to find truth in that path. He regarded man as a dual being, not wholly a machine, with hinges and pulleys, cords and tubes, nor yet made up of mind alone, to which the body is a clog, but as composed of a material body and an immaterial mind linked together and harmoniously acting and reacting upon each other. He believed the brain to be a well-strung instrument, discoursing sweet music at the mind's behest, and held that as was the excellency of the instrument so was the beauty of the melody.

The phrenological doctrine therefore is, that intellect is dependent for manifestation upon the body—acts through the material organization. In other words, that "the brain is the organ of the mind." This fundamental proposition has, I believe, the ascent of mankind. It should follow, then, that as is the size of the brain so is the vigor of the mind. Is this true? Between the size of the brain and the power of the mind there is no uniform exact relation. Certain qualifying circumstances must therefore be taken into account. Hence, enlarged experience and more accurate observation have made it necessary to modify the proposition, and to say that as is the size of the brain,
other things being equal, so is the strength of the intellect. Again, can any true estimate of the quality of the brain be based upon a study of the physiognomy? If this can not be done, the principles of phrenology avail naught in practice, and are therefore worthless. In the futile attempt to make physiognomy the basis of phrenology temperament became involved in the problem. When the phrenologist would judge of the character of a person by his cranial bumps and facial prominences, he found the limitations so many that the attempt was necessarily little more than a study of temperament. If it be true, as many hold, that temperament affords an indication or test of the tone and intensity of the mind, its study at once becomes invested with scientific interest.

Temperament belongs to classes, as idiosyncrasy belongs to individuals. Temperament is a physiological condition in which the several functions of the system are tempered and displayed in characteristics easily recognized by the eye. Hippocrates classified the temperaments according to a false hypothesis. He divided them into four. This classification, however, was followed by all ancient writers in medicine, and, with some modifications, is still in use. They were denominated after the respective fluids or humors, the superabundance of which in the economy was supposed to produce them. Thus the sanguineous was caused by an excess of the red particles of the blood; the phlegmatic was produced by a superabundance of phlegm, or lymph, or watery particles; the bilious or cholerie by a surplus of yellow bile; and the melancholic or atrabiliary had its rise in an excess of black bile. To these Dr. Gregory added the nervous, which was at once adopted. Boerhaave proposed as many as eight temperaments. Broussais, who attempted to reform the science, made as many as nine cardinal divisions. But the five I have named, with endless combinations, are held to include every individual case.

What are the characteristics of body and mind which mark these varieties of temperament? How far they are fanciful or well founded are questions which I shall not here discuss. Though the classification was unquestionably based upon archaic and false notions of anatomy and physiology, it can not be denied that temperament has a good scientific basis. Let me consider, first, the sanguineous.

In this, the heart and arteries are supposed to possess a predominant energy, and the pulse, consequently, is strong, frequent, and regular; the veins are blue, full, and large; the complexion florid, the countenance animated, the stature erect, the figure agreeable, though strongly marked; the flesh firm, with a proportionate secretion of fat; the hair of a yellow, chestnut, or auburn color. The nervous impressions of individuals of this temperament are acute; the imagination lively and luxuriant; the perception quick; the memory tenacious; the disposition passionate, but easily appeased. They are amorous and fond of good cheer. In love or in war, in action or in council, the sanguineous man is ardent and daring, but inconstant and changeable.

Among the ancients the statues of Antinous and the Apollo Belvedere afford the external marks of this temperament, while the moral side of it is displayed in the lives of Aleibiades and Marc Antony. In modern times we find it in Prince Rupert and Cardinal Richelieu. Amiable, fortunate, and valorous, but light and inconstant to the end of their brilliant careers, were these historic possessors of the sanguineous temperament. This temperament predominates in the female sex. Men of this temperament, devoting themselves to labor which demands great muscular exertion, acquire in time the marks of a subdivision of it termed the athletic or muscular. Homer's Ajax and the Farnesian Hercules, John Sullivan, the noted ballet dancers and trapeze performers of our day, are of this type. They are dull and unimpressible. An individual of this temperament, therefore, is not easily roused, but when he is, he surmounts every obstacle.

The second temperament, or general character noticed by older physiologists is the choleric or bilious. In this the liver, or bile-making organ, is supposed to be overactive, the sanguineous system being also well developed. Here, too, the pulse is strong and hard, but more frequent than in the last. The veins are superficial and projecting. The sensibility is acute
and easily excited, with a capacity for dwelling long on a single object. The skin is brownish with a tendency to yellowness, the hair black or dark brown, the body moderately fleshy, the muscles firm and well marked, the figure expressive. In this temperament an active, exuberant bilious is united to an active, exuberant sanguineous system, and every vital organ is therefore abundantly supplied with blood, and its tone is high. The brain acts with energy, and the emotions are as intense as the intellectual faculties are active and vivid. The temper of the mind exhibits impetuosity, abruptness, and violence of passion, hardihood in the conception of a project, steadiness, inflexibility in its pursuit, and indefatigable perseverance in its execution. To this temperament have belonged

"Those grand visitations of the earth,
That on its altered face for ages leave
The traces of their might."

They have furnished the heroes and martyrs for all ages. Men, audacious, active, fearless, uncompromising, who, impelled by some master passion or high principle, have signalized themselves by great virtues or great crimes, and have been the terror or admiration of the race. Such were Achilles, Alexander, Cesar, Mohammed, Attila, Luther, Cromwell, Washington, Napoleon, Lee, Booth, Stonewall Jackson, Grant.

The third temperament is the melancholic. In this black bile is supposed to prevail, the predominant energy of the sanguineous system being sunk below its level, and derangement of some abdominal organ or nervous center causing the vital function to be carried on in a weak or irregular manner. Thus it is accounted for. The skin assumes a deeper tinge than in the bilious; the countenance is sallow and sad; the hair black; the pulse hard and habitually contracted; the imagination is gloomy, and the temper irritable and suspicious. It is a morbid affection rather than a natural and primitive constitution, and is often consequent on incessant study, long continued sorrow, overtaxing the liver with food and drink, or whatever impairs the tone of the biliary system. Physiologists name as examples of this temperament, Tiberins, Tasso, and Pascal. I might add to these, Cowper, Mrs. Browning, Mrs. Hemans, "L. E. L.," and Shakespeare's greatest conception, Hamlet.

The fourth temperament is the phlegmatic, lymphatic, leuco-phlegmatic. Here the proportion of fluids is too great for that of the solids, and the character of the solids is defective. Tone is wanting; the flesh is soft; the hair flaxen or fair: the pulse weak and slow; the figure plump, but without expression; the attention wavering, and the memory weak. All the vital actions are more or less languid. The love of indolence is strong, and the aversion to exercise of body or mind insuperable. The opinions or emotions of such rarely change. According to Burton they are "seldom taken with love-melancholy, but once taken are never freed." The phlegmatic never become illustrious by deeds of their own. It is by accident only that they ever reach distinction or emerge from the good-natured, obscure, plodding group to which they belong. Theodosius, in earlier times, Henry Sixth, of England; Louis Sixteenth, of France; Edward the Confessor; Jacques, in "As You Like It," are noted names in history and fiction, and your own acquaintance will probably supply you with many more examples of this temperament.

The nervous, which is the fifth and last variety, like the melancholic, is seldom primitive, but is more often developed by artificial cau-es. The nervous system predominates over all. Vivacity of sensation, promptitude; but fickleness of determination, small, soft, and wasted muscles, and generally a slender form characterize this temperament. Created by a sedentary, studious, or fashionable life, and the appliances which attend it, it is intensified as the causes continue, and results in well-marked disease. Among the more illustrious of the examples of this unfortunate temperament may be mentioned Voltaire, Poe, and Shelley; but the experienced physician sees in the hysterical woman its common typical illustration.

Such is the history of the five varieties of temperament as gleaned from the older medical writers. It must be admitted that the lines are not sharply drawn. The different temperaments are constantly running into one
another; they mingle in every variety of shade, and not one of them perhaps is to be found perfect in any individual. General Grant and Napoleon combined the bilious and phlegmatic. Voltaire was a mixture of the bilious and nervous. Henry Clay, General Lee, and Stonewall Jackson afford examples of the sanguineous and bilious. The nervous and bilious meet in some; in many, the bilious and sanguineous; but in most of all, the sanguineous and phlegmatic—that temperament which fits to bear, while it encourages to hope, which qualifies the thousand hands, by which it must be done, for the drudgery of life, for the humbler offices of society.

Before leaving this part of our subject allow me to call your attention for one moment to another division or grouping of the constitutional peculiarities of man, which was proposed by one of my early masters, Prof. Charles Caldwell. This learned, but purely theoretical man, deemed his classification of temperament as more philosophical than any which preceded it. He taught that there were seven varieties, founding them on the solids of the body, as Hippocrates had referred his to the fluids. And as, according to Hippocrates, the predominance of certain humors, blood, yellow and black bile, or phlegm, gave to the individual his peculiar constitutional traits, so, according to the teaching of Dr. Caldwell, it is the development of certain ruling organs which makes a man what he is. I will not waste time with mention of the names, even, entering into the classification on which the old physician descanted with his wonted grandiloquence, but shall rather return to this, our original inquiry:

What determines the moral and intellectual character of an individual? Is it the proportion of blood, yellow or black bile, lymph, and nervous fluid, in his system? Or is it the size of his brain, or its configuration, or its organization, or all these combined? It is the common observation, the common experience of mankind, and no dogma of phrenology, that brain is the material charter, the visible title to the ownership of mind. Exceptions almost innumerable contest the soundness of it, but a conviction of its general truth clings to the mind like the impressions of instinct. And the poets, who find Nature as she is, give to genius the fair, ample front, and make the forehead of the clown villainously low. But it is equally the observation and experience of men that a large head is no sure guarantee of a great mind or of great virtues. It may be large, and the individual may be stupid and vicious, or he may be gifted and base, or he may be amiable and dull. Size alone, then, is not sufficient. But it must be brain in the right place, and brain, too, of the right sort. The elephant has a brain twice as large as that of a man. Chanticleer and the canary bird have each, relatively, a larger brain in proportion to the size of his body than has man. Mere brain will not do. Nor will even the front of Jove himself assure mind. There are few collections of casts of heads of the great of the earth which do not contain one whose depressed and narrow front denotes old age and imbecility. And yet it shall be the cast of the head of Lord Chatham, the greatest statesman and orator of his country and his time. The head of one whose talk is solely of bullocks and of bargains often exceeds in mere size that of Daniel Webster, whose grandeur of thought and amplitude of view surpassed that of any other American statesman.

If, then, the possessor of a large head may be dull and the master of a small one gifted, it follows that we must look deeper for the true solution of character. Does the predominance of bile, or blood, or water in the system render one ardent, or ambitious, or meek and benevolent, or bold and unprincipled? Take, for example, the bilious temperament—the temperament of genius—and what a motley host do we find marshaled under it! Philosophers, poets, patriots, philanthropists, usurpers, tyrants, regicides, conspirators, the truth-loving and the truth-contemning, the magnanimous, the selfish, the timid, the courageous, the proud, the humble, the ambitious, the base, apostates and paricides, heroes and martyrs, men who slept but to dream of evil, and rose up only to commit it, who murdered their subjects before dinner for an appetite, and after dinner for digestion. And men, again, who for the diffusion of divine truth have braved the pestilential
burnings of every foreign atmosphere, whom no danger could appal nor torture overcome, who endured the fire and faggot, were cast to serpents, and rent by wild beasts, were sawn asunder, but remained to the last, unshaken, undismayed. Ignatius Loyola and John Knox were of this class. Could two characters be more unlike than those of John Howard, the philanthropist, and Richard Third? And yet they belonged equally to the same temperament, and exhibited through life the same invincible firmness of purpose. Look on the portrait of Richard as drawn by his mother:

"Tetchy and wayward was thy infancy;
Thy school days frightful, desperate, wild and furious,
Thy prime of manhood daring, bold, and venturous,
Thy age confirmed, proud, subtle, sly and bloody."

In Howard we have a character which will compare with the noblest that adorn the annals of our race. Yet in decision of character he was equaled, but could not be surpassed, by Nero or Cromwell. Whence then that moral dissimilitude, wide as the poles? Will temperament account for it? They were alike of the bilious—that under which the bold bad men, as well as the good great men have ranged. Will education explain it? Education doubtless had much to do in directing and confirming the inborn primitive tendency, but the question still recurs: Whence that innate propensity, so intense in one to acts of goodness, in the others so resistless to violence, contest, bloodshed, and crime? The difference may be sought for in the development and organization of the brain, not in the mere amount, but in its quality; and not only in its absolute quality and tone, but in the size of particular compartments of it. What the peculiar condition is on which its perfection depends, science has not yet revealed to chemist or anatomist. We are still in the dark concerning it.

On analysis, the brain of a man is found to consist of 80 per cent of water, 4 of white fat, 7 of albumen, 4 of sulphur, and 1 1/2 of phosphorus, and a small portion of a number of salts. The ratio of water in the brain of a calf is also just 80 per cent. I will not stop here to inquire, what it would puzzle the most acute phrenologist or metaphysician to determine, how far the presence of this brilliant inflammable principle—phosphorus—may be concerned in evolving the hot, hasty temper of of the soldier, and the proverbial irritability of the poet, the flashings of wit and the coruscations of genius.

A mystery hangs over the vital functions.

In the stomach is a fluid which dissolves not only soft and vegetable substan-ces, but cartilage and bone, and of this powerful solvent the chemist finds ninety parts to be water. A difference of quality is far from implying, of necessity, a difference in composition. Chemically there is no difference between the diamond and charcoal; little between soft iron, which yields easily to the chisel, and cast steel, which cuts all but silex and the diamond. Diamond is to be regarded as the type of Caesar's brain, charcoal of the butcher's. Chatham's small brain was steel, and thus his full-orbed intellect "shone like the sun," bright, piercing, resistless. George the Third lost America because his brain was, as soft iron, ductile, flexible or malleable, as this or that political manipulator pulled or twisted or hammered it.

Temperament is the thermometer by which the tone of the brain is to be ascertained. By the eye, the curling locks, the complexion, the pulse, all the movements of the individual, we are to determine whether the brain is like soft metal or the Damascus blade, the dull, spongy charcoal or the glittering gem. Developed in one region, and having the true temper, and moral influences favoring, a Howard is formed to make "the circumnavigation of charity." Developed in another region, and allowing a bad education or the spirit of a barbarous age to confirm and strengthen the bad tendency, an Attila comes forth to desolate and to curse. The twig is bent by nature, certain tendencies are innate, education, in its broad sense, may control, improve, subdue, almost eradicate. The predisposition is given, is sometimes inherited, sometimes comes as the wind blows, we see not whence. It was before the propitious gale of benevolence that Howard pursued the voyage of his illustrious life. Ambition is the headlong current by which warriors and statesmen, the mighty men of the earth, have been swept along the tumultuous sea of human affairs.
This principle finds further and stronger illustration in the lives and characters of Julius Cesar and Marc Antony. One can not be said to have been worse or better than the other. Both were highly though not equally gifted, but they differed widely in their passions, powerful in both, though not the same in both. Cesar, like Antony, was touched by the charms of Egypt’s dazzling Queen, and bowed for a moment to their supremacy, but it was only for a moment. It was but an episode in his eventful life, from which he quickly returned to its grand story. The heady current adown which he sailed was not to be stayed or turned aside from its course. The spur by which his daring spirit was goaded almost to madness Marc Antony’s peaceful bosom scarcely knew. With Cesar ambition was a whirlwind drawing all other passions into its desolating path. With Marc Antony it was a fitful breeze, now gusty and loud, now softer than the whisper of love.

The orator who had inflamed the Roman people by his eloquence yielded himself an easy captive to a more bewitching eloquence, and for another Helen bade “Rome her Tiber melt, and the wide arch of the ranged empire fall!”

So much for the scientific aspect of the question. But, gentlemen of the graduating class, I should fall short of my duty to you if I should stop here. The theme is indeed scientific, but it has a spiritual bearing as well, which is of far greater interest and deeper moment. While I have made use of the spiritists’ term, and called the brain “the organ of the mind,” I have perhaps at the same time incurred the imputation of materialism, in that my comparisons and metaphors have attached too much importance to the physical quality and conformation of brain in accounting for differences in the minds of men. It can not be denied that mental phenomena are intense or dull, broad or narrow, as the various organs of the brain are well or ill developed. But it would be fatal to hence conclude that brain is in any sense mind. Though placed for a time in a tenement of flesh, “the mind is its own place.” Brain is no more mind than harp is music. The harp makes music only under the hand of the player, and he, though a master, would bring forth but discord and confusion if his instrument were out of tune or temper.

I said that psychic science had all but demonstrated the immortality of the soul. Whatever may be the outcome of pre-ent researches into the unknown, it is certain that the instinct of man with the trend of science is and has ever been in accord with the reasoning of Plato and the teachings of Paul concerning this question of questions.

If the Ego, the I, is, it must always have been; and if it is, and always has been, it must always be. “Nought from nothing comes” is a maxim which will stand while logic lasts and worlds circle their orbits. And to say that the soul of man, be his body evolved as it may from the distant protozoön or protophyte which was the beginning of life on this globe, to say that the sublime phenomena of this soul are but a series of vibrations in the specialized and highly differentiated protoplasm of the cells of the brain, is as monstrous as it would be to say that the suns and the planets dropped full-orbed out of the inane. No, gentlemen, we are, we have been, and we shall be:

“Our birth is but a sleep, and a forgetting; The soul that rises with us, our life’s star, Hath had elsewhere its setting, and cometh from afar: Not in entire forgetfulness, And not in utter nakedness, But trailing clouds of glory do we come From God who is our home.”

We are here without our will, but not without responsibility. Life with certainty of trial and trouble, but with possibility of success and happiness, is before you. Quit you like men! Be strong! Give careful heed to the ineffable teachings and example of the Great Physician, and so live and practice and ornament the high office which is your calling, that, as your souls expand by study, thought, and experience, they may come to be the better fitted for endless unfolding in the infinite beyond. There, through the eons of eternity, with fit environment, the deathless spirit of man shall approximate more and more to that perfection which is God: “For we know that if our earthly house of this tabernacle were dissolved, we have a building of God, an house not made with hands, eternal in the heavens.”

Good-bye.
LA GRIPPE.*

BY CORNELIUS SKINNER, M.D.
Professor of Obstetrics and Gynecology, Hospital College of Medicine, Louisville, Ky.

The epidemic of 1510 spread from Malta in a direction from southeast to northwest and over the whole of Europe, attacking every one, but with the exception of children very few died; with us the death-rate among children was small, old people being the victims. 1510: Supra-orbital pains, delirium, gastrodynia were the symptoms; on the abatement diarrhea and sweats set in—bleeding and purging were injurious; blisters to hands, feet, and occiput were applied. 1891: Supra-orbital pains, severe gastrodynia well marked, and purgatives beneficial.

Again, in 1557, forty-seven years after the first epidemic, it appears, coming from Asia across Europe and to America, beginning in the autumn, lasting through the winter, spring, and summer; yet, curiously, the author (Mercatus) states that every one was attacked on the same day. Symptoms were fever, headache, catarrh, sore throat, cough, and great weakness, just as in our recent epidemic. If an offensive sweat ensued after bleeding, the patient recovered, but if exhaustion and fever remained, patient succumbed; disease often terminated in diarrhea.

The epidemic of 1580 spread over Europe, Africa, and Asia. It was generally mild and characterized by copious sweats, but in many places the death-rate was high. In Rome nine thousand died, and Madrid was almost depopulated. Weir says venesection was the cause of Rome's mortality; "the best mode of treatment was trust in nature." From 1591 until 1712 Europe, America, North and South, had twelve visitations, none of them wide-spread.

The epidemic of 1730, within five months, spread over Russia, Poland, Hungary, Germany (in Vienna 60,000 cases), Sweden, and Denmark, England, France, and throughout Spain to Mexico. Manifestations were pains in limbs, catarrh, oppression of chest, hoarseness, and cough. You will observe how these symptoms compare with those of the present time. The deaths were mainly among the aged and children.

This epidemic was almost repeated in 1732 to 1737, coming into America; course generally favorable, excepting to the asthmatic, aged, and phthisical. The three forms, encephalic, thoracic, and abdominal, were observed. Many ascribed the epidemic to changes of temperature. From 1737 to 1761 six epidemics are recorded, three of them in North America. In 1762 Europe was again visited; scarcely one ninetieth of the people escaped; in 1767, in Germany, France, Italy, England, Spain, and America; 1772, in North America.

The epidemic of 1775 spread over Europe, and from England to America; again to North America in 1781. 1782 brings us to one of the most remarkable scourges; it was so sudden and wide-spread in Asia, Russia, and America that all were credited with being its source. In Russia the mercury, in one night, rose from 35° below zero to 5° above, and on that day forty thousand people fell sick, even the ships upon the seas not escaping. In Vienna three fourths of the inhabitants were attacked, and it was called "lightning catarrh," characterized by great prostration, pains in back, sternum, throat, and larynx; frequent complications were pneumonia and inflammation of bowels; children were almost exempt.

From 1788 to 1830 a number of minor epidemics occurred in Europe and America, but from 1830 to 1833 there seems to have been one that made a tour of the civilized world, and in the whole three years never permitted itself to be forgotten. In 1837 London was visited with a most fatal form of it, which astonished all observers.

From 1850 to the present time literature mentions a new outbreak every year, and we see that either in fact influenza has become almost a permanent citizen, or, like crime, we think it is on the increase because the facilities for disseminating news are so much greater.

The etiology of influenza is unknown. No age or condition exempts one from its attacks, single or repeated, neither can we connect it with atmospheric conditions or local circumstances. Its contagiousness is held by some and disputed by others. The simultaneous attack of whole families is, to my mind, a convincing argument against the contagion; and

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*Read before the Louisville Medical-Chirurgical Society, February, 1892.
this can be further strengthened by the fact that the most rigid isolation does not protect.

To-day the ear of the clinician is turned to the bacteriologist; and as we listen the announcement of Mr. Influenza Bacillus' arrival is heard through Dr. R. Pfeiffer, of Berlin. For his destruction I feel secure in saying every thing has been tried, when we consider that the gauntlet has been run from 16 grains of assafetida four times daily to prayers for Divine interference.

The symptoms are most variable, yet we find a few common ones, as sudden attack of pain in back, limbs, and head, constriction of chest, sore throat, cough, and extreme prostration. Fever I did not observe in all cases, and with a single exception (106°) not high in any. Per-

sistent cough with extreme prostration I regard as the most pathognomonie sign.

_Treatment._ Nothing gave me such satisfactory results as rest in bed, a saline purge, mag. sulph. 5 j every hour, until bowels moved well. Phenacetin, grs. 5 to 10, every four hours for pain; its administration discontinued when pain was relieved, and resumed when discomfort showed signs of returning.

For cough I gave syrup syr. 5 j; syrup prun. virg. 5 j; codeia, grs. 5 j. Teaspoonful every three or four hours. For the exhaustion, milk punch. The old people received my closest attention for complications.

The following is a tabulated list of 1,966 cases, reported to me by twenty-four of my medical friends, and seen by them during the
months of December and January of the late epidemic, which I have classified, showing the various complications and deaths, with cause of each death.

These reports were in answer to the following circular letter, sent out by me about February 1st:

LOUISVILLE, K.Y., January 14, 1892.

DEAR DOCTOR: Desirous of obtaining some statistics of our late endemic, "La Grippe," I herewith ask a few of my medical friends to answer the following questions:

1. How many cases did you see from November 1st to January 1st?
2. How many were complicated with pneumonia?
3. How many were complicated with ear trouble?
4. How many were complicated with eye trouble?
5. What other complications?
6. How many deaths, and what the immediate cause of death?

Hoping to receive an early answer, that I may get my report ready by the 22d, I remain,

Yours truly, Cornelius Skinner.

LOUISVILLE.

Societies.

LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, February 19, 1891. D. T. Smith, M. D., President pro tem, in the chair.

The essay of the evening was read by Dr. F. C. Simpson; subject, Diabetes Mellitus in Children.

I beg the Society's pardon for introducing a subject of which so little is known as diabetes mellitus in children. The subject was brought to my mind by a case recently under my charge. It is the first case I have had in a practice of ten years. I will here state some facts gleaned from some of our recent writers:

"Although diabetes mellitus is comparatively a rare disease at any period of life, it does occur in varying frequency from birth to old age.

"The highest point of liability to this affection is between forty-five and fifty years, whence the line slopes to each extreme.

"So rare is diabetes mellitus in infancy and childhood that few of our medical treatises mention it at all. The proportion of males to females varies distinctly with age. It is about equal up to ten years of age, and from that up it is more frequent in the male."

Dr. John Nagle, Register of Vital Statistics of New York City, says that from 1878 to 1888 there were only four deaths reported from diabetes mellitus in subjects under five years of age.

The rarity of the affection at an early period of life is clearly shown by such statistics. Curt Stern has published an exhaustive article on diabetes mellitus in children. Stern believes that the disease is not nearly so rare in children as has been commonly supposed; as to age itself, he found six under one year, one seeming to be born with it, as it was noted a few days after birth; seven were over one year, three over two years, seven over three years, six over four years, and so on up to fifteen years of age. The children affected with this disease seem to belong to the better class. Heredity seems to be the prime cause, as the parents were often diabetic, and frequently when the parents were not some of their relatives were. It has been found to follow previous existing disease, such as gastric disturbances; it also follows exposure to wet and cold, and injuries to the brain as produced by falls or blows, yet the cause of diabetes is wrapped in as much obscurity now as it was twenty years ago.

In reviewing all the facts, heredity seems to be the predominating factor so far as the development of the disease in children is concerned.

Duration in diabetes varies greatly. Out of thirty-four cases reported by Stern the shortest duration was two days; in the longest the case had not terminated at the end of five years. In seven cases it did not last one month, and of these one was cured. Seventeen lasted less than one year, and of these seven were cured. Ten lasted over one year, and not one of these recovered; and it is shown that none of these cases recovered that lasted over one year. It would seem, too, that the smaller the child the quicker the course of the disease, although this is not without exception. It is also interesting to note that the girl who died in two days was four years old, while the child that was born with saccharine urine recovered in eight months.
It may be safely asserted that no constant lesion has been found which distinguishes diabetes mellitus. The results of post-mortem examinations are as various as the theories regarding the cause of the disease. The familiar glycogenic function of the liver caused eager search to be directed to this organ for a solution of the problem. Hundreds of ingenious experiments have been performed, but with no fixed result. Since Bernard's marvelous discovery of the seat of the vaso-motor center in the fourth ventricle, and the effect of its destruction or irritation upon the liver and urine, an enormous amount of work has been done in the way of investigation into the nervous influences possible to be brought to bear and capable of imitating or of establishing this disease.

Every comprehensive work upon physiology gives a list and describes at length the most philosophical of these experiments, and the most plausible results.

Pavy, as is well known, believes that the whole trouble is due to imperfect dearterialized venous blood, consequent upon vaso-motor paralysis, especially of the vessels of the chylomicotic system.

In regard to symptoms I find the case I am about to report does not differ essentially from that which I have seen in the adult. I shall mention treatment at the conclusion of my report.

John S., boy, three and one half years old; parents living and healthy, neither parent showing any hereditary taint as to diabetes. I saw him on October 23, 1891; he seemed to be well nourished, and what I would call a fairly healthy boy. I gleaned from the parents the following history:

The boy had for the past three weeks shown decided muscular weakness, increased urination, and quite a thirst, drinking quite a quantity of water during the twenty-four hours. He also had a partial loss of appetite, which is contrary to the habit in the majority of these attacks. He was very fond of sweet things, and was allowed to eat freely of these, such as preserves, candy, etc. Upon inquiry his mother thought that he must have passed about three and one half to four pints of urine in twenty-four hours. He asked for water while I was examining him, and drank off a glass without stopping. I asked for a sample of his urine, which was sent me next morning, the first he passed after getting out of bed. Test of urine: color, straw; reaction, alkaline; specific gravity 1040. Upon adding the urine to Fehling's solution under heat it turned a yellow color, which was at once precipitated to a copper red, showing conclusively that sugar was present. I afterward had a quantitative test made, and the report was about three grains of sugar to the ounce. At this time the boy's parents gave another chapter in his history, in which it was brought out that the little fellow had fallen down the stairs (about fifteen or twenty steps) just before the time that they had noticed the symptoms detailed above. In the fall the boy did not become unconscious, and there was nothing more than a scare. He did not complain of any pain about the head; in fact, he seemed to be all right in a few minutes, and never showed any signs of after-effect.

I made another examination of his urine at the end of a week and found that there was a slight decrease in all his symptoms, and not as much sugar; specific gravity 1030. His mother said that he did not show as much thirst, and that the quantity passed was only three pints during the twenty-four hours. I had instructed her to carefully measure each quantity passed. I saw the child at the end of two weeks, and a sample of his urine showed a specific gravity of 1024. Fehling's test showed sugar in very small quantity. I had a quantitative test made, and it showed only one grain to the ounce. His general condition had improved, thirst was not as great, and the quantity was only two pints in the twenty-four hours.

The treatment was ergot and bicarbonates, and this was the only treatment he received during the three weeks. He has continued to improve from the beginning of treatment, and at the end of four weeks the urine is normal. His general health is greatly improved, and I have made examinations of his urine every week and found nothing abnormal. I consider the boy cured of his diabetes.

The following questions may be pertinently asked: What was the cause of this glycosuria?
Was it due to injury of the brain induced by the fall, or was it due to the causes that produce the diabetes we so frequently see in the adult?

**DISCUSSION.**

Dr. John A. Larrabee: I have listened with much interest to the report of Dr. Simpson's case, and also his very thorough résumé of the subject as given by the authorities. Diabetes mellitus is, fortunately, a rare disease, and is supposed to be exceptional both in children and the aged; no age, however, is exempt.

In England, during a period of about seven years (1848 to 1855), there were 420 deaths from diabetes mellitus, the population being about 36,000,000, which would give one case of diabetes for about 86,000 people annually. Later on, in England (1861 to 1871), we find one case for about 3,509 persons in the ten years. In New York City the mortality is seven per cent. In the polyclinic of Berlin it was seen but three times in 10,000 patients treated. Several writers have called attention to the greater frequency of diabetes among the Jews. Seegen reports 140 cases, 36 of which were in Jews. I have three cases, all of whom are in adult Hebrew women. I have never recognized it in a child, and have thought that possibly the milk-feeding might have some part in this observed immunity, inasmuch as the lactic acid, skimmed milk, and buttermilk plan of treatment have been quite successful, and inasmuch as the rheumatic and gouty diatheses are directly opposed to diabetes.

Some author gives an account of eight children in a family, whose parents were entirely healthy, who fell victims to diabetes as soon as they reached the age of puberty; another wherein four children of a Jew were attacked and died of diabetes.

As the author says, the accumulated weight of testimony is in favor of heredity as the cause. I think it can be shown with greater certainty to be connected with inherited neurotic tendencies. Epileptic and nervous, hysterical parents often leave this legacy to their children, and I think that the *fons et origo mali* is a changed polarity of the nervous system in the medulla without any observable lesion.

Some few meetings since we had a very interesting case of death from a man's falling out of bed and striking on the flat of his back; he had no observable traumatism, but he had priapism persistent up to time of death. I have heard of very many such cases of shock to the spine producing vaso-motor disturbance. Claude Bernard settled that question fifty years ago, and I do not think it has been unsettled. I think that there can be no doubt as to the shock of fear, or concussion from the fall, playing an important rôle in this case. The diathesis has a great deal to do with the effect of a nervous shock. A nerve shock from accident or from psychical cause in a neurotic is a very different thing from the same shock in the phlegmatic, just as a blow or jar upon the hip-joint is a very different thing to the scrofulous child from what it is to the healthy; and what a train of consequences come from it!

Dr. F. C. Wilson: The only case of diabetes mellitus I have ever seen in a child was a fatal one. The child was about nine years old. I had supposed that this disease in case of children was almost certain to be fatal, and to learn of a number of cases that have recovered was rather a surprise to me.

Dr. T. L. McDermott: The case reported by Dr. Simpson is very interesting. It has been my experience, as it has been that of other doctors, to find sometimes that children die without our knowing to a certainty the correct disease. I suggest that it would be a wise course for us to examine samples of the urine in treating children, to see whether there is any indication of diabetes mellitus. I do not know how the doctor secured his samples.

Dr. W. O. Roberts: Some two or three years ago I was called to see a child who had adherent prepuce; there was considerable inflammation of the prepuce, but no contraction at all. I had seen a similar case some little time before that, and the question with me was whether or not the child ought to be circumcised. An examination of the urine showed the presence of considerable sugar. We put the child on diet, took sweets away from it, and in a few days the urine cleared up, no longer showing the presence of sugar. The child recovered without circumcision. I have seen two or three cases like this since.
I think that in children we very frequently have a temporary condition of diabetes mellitus, and I believe in many cases this might cause irritation and inflammation of the prepuce, or an irritation of the pudendal nerves might by reflex cause the glycosuria.

Dr. Larrabee: In this connection I would like to ask the question, whether any one has tried the new remedy, the celebrated East Indian remedy, prepared from the plant Syzygium jambolanum, in the treatment of diabetes mellitus, which necessitates no change in the diet.

Dr. William Bailey: I am unable to understand the position taken by Dr. Simpson, and indicated by some others, concerning diabetes mellitus. If sugar is present in the urine, it is certainly a case of diabetes; again, if the sugar in the urine is due to a shock, then I can not understand why the shock is not the cause of the diabetes mellitus. In this particular case, if it was caused by a shock and lasted a month, it is a case of diabetes mellitus just as much as though it lasted a year. It may have been only temporary, but it was diabetes mellitus notwithstanding.

Now, in the case mentioned as dying in two days, I can not see how any one could report this as dying from diabetes mellitus; death may have resulted from some disease of the brain, with glycosuria as a symptom.

Dr. Larrabee: I think it quite possible that diabetes mellitus is a much more frequent disease of childhood than is recognized. It is certainly much more likely to be overlooked than to go undiagnosed. But few of the works, as Dr. Simpson says, upon children's diseases make mention of it. The same was true a few years ago in regard to rheumatism of the child and the infant, but a closer observation developed the fact that it was one of the most common as well as most disastrous ailments. A more careful observation of infants and children is needed in order to recognize these diseases. I certainly agree with Dr. McDermott, that we ought more frequently to make examination of the urine in children's practice.

Dr. T. S. Bullock: In order that it may be a matter of record in this Society, I would like to know how many of the Fellows have ever seen a case of diabetes mellitus in a child.

Dr. Wilson: I have seen one. (Already reported.) Drs. Vance, Bullock, Kelly, and Cecil each stated he had never seen a case.

Dr. Simpson: Mr. President, the point that I wished to bring before you is, was this a case of diabetes mellitus, or was the saccharine due to the fall, the sugar disappearing after the shock passed off? Dr. Bailey has thrown some light on the subject by saying that the cause, whatever it was, does not change the fact that it was a case of diabetes mellitus. Because falls are put down among the causes, and, notwithstanding the fact that the cause of this trouble is wrapped in so much doubt, we are justified in admitting that the shock had something to do with producing the saccharine urine, and that the nervous element was the predisposing cause. The patient was an exceedingly nervous little fellow, often not sleeping over three or four hours during the night. He also comes of nervous parentage, his mother was a very nervous woman. Could you select a better subject for an attack of this kind than this boy? As most of these cases are supposed to die, and as Stern's statistics show a good number of recoveries, it gives us more confidence to hope for a recovery when we encounter this disease in infancy.

The treatment in this case was the same as that I follow in the adult. I gave codeine to get rest, ergot to control the excessive secretion of the kidney, and restricted the diet. I still have him under observation, and expect to keep watch over him for a year. He is in good health now, and looks as if he had never had any serious illness.

CONTINUED REPORTS OF OLD CASES.

Dr. D. T. Smith: At the last meeting I presented a case of tetany, and you will probably remember it was mentioned that we would let the case run for a couple of weeks and see the result of time on it. I will state that at the end of one week the case was entirely well, without any treatment that particularly bore on the case. Circumcision was not done, nor was there any medication whatever.

Dr. Vance: The case has since been circum-
Two years previous to his first visit to me he had an attack of what his mother claimed was meningitis; he apparently made a perfect recovery from this, and about six months later he sustained a fall from the height of about ten feet, hitting on his head. Beyond a few days' confinement to the house no results seemed to follow from the fall; not until at least one year after this time were any untoward symptoms observed. It was then noticed that the child was "cross-eyed" in the right eye, and on this account I was consulted.

The question of special interest in the case is, whether either the attack of meningitis or the fall played any part in producing the paralysis. In my judgment the sickness and injury were too long antecedent to have caused the paralytic symptoms, and no other cause is at present apparent. The intra-ocular condition is normal in both eyes; no optic neuritis, and no symptoms of tumor, unless the paralysis be one.

Dr. Larrabee: Referring to the case as reported by Dr. Dabney: Owing to the length of time between the attack of meningitis and the appearance of paralysis, I am inclined to agree with Dr. Dabney, that the paralytic trouble was not a result of the attack of meningitis; the same would apply to the fall eighteen months prior to the paralysis—the time is certainly too long for the fall to have been the cause of the paralysis.

Dr. Vance: Might it not be possible that the paralysis was of spinal origin? Oftentimes this is the case according to history received from patients, the child having meningitis at the onset. This could easily be recognized by electrical examination; it usually can be discovered upon simple observation.

RECENT CASES.

Dr. Cartledge: I saw an interesting case yesterday, a boy four years old, who had been kicked by a mule; I saw him three hours after the injury was received, and found a fracture of the frontal bone, on the left side, extending perhaps to the median line, principally across the left side, which was two and one half inches in a transverse direction and two inches in a vertical direction, a piece of the bone being pressed down into the brain, and the brain substance oozing through. It was impossible to elevate the bone to its original position, therefore I used the trephine in order to get the elevator under. I took out all the depressed bone, closed up the wound nicely, except at the lower angle where the drain was inserted. During all this time the boy never lost consciousness, which illustrates the wonderful tolerance of the brain of a child to manipulation.

Dr. Roberts: Dr. Vance will probably remember a case that came under our observation several years ago similar to the one reported by Dr. Cartledge, in which a boy had fracture of the frontal bone. I carefully removed all the depressed bone, and brain substance to the amount of about a tablespoonful was also taken away. The wound was closed up nicely, and the boy recovered.

Dr. Vance: On this point I would like to know if any member present has ever seen or known of a silver plate being put in the skull; I mean laid down upon the cranium and the scalp put over it, the silver to take the place of a piece of bone removed. I have asked this question in a number of meetings, and have never yet had an affirmative answer. I have never seen it in any book, although it is mentioned in some of the works on the subject I believe.

Dr. A. M. Cartledge: I do not believe that silver has ever been used to take the place of bone removed, but it is used as a compress.

Dr. Simpson: There was a negro up in the country, I think the case is reported by Dr
Gross, who had been struck on the head, receiving such a wound as made it necessary to remove a portion of the bone, and a silver plate was applied. I believe this case was seen somewhere near Bardstown. I do not question but the silver plate was applied.

Dr. Vance: I do not believe that silver could be placed under the scalp and stay there, as it would act as a foreign body.

Dr. W. L. Rodman: Both Gross and Drewitt report that a silver plate has been applied in the manner spoken of by Dr. Vance.

Dr. Bullock: Is there any authenticated case? There is no man who has personally had any experience, or has seen a case of this sort. It seems to me that, however carefully a silver plate were placed under the scalp, it would be an irritant, and, even if it should not produce any immediate trouble, that the mere presence of it would act as a foreign body and create irritation, thus defeating the end for which it was applied.

Dr. Larrabee: Following in the line of your neurological discussion I have something interesting to report. Some seven or eight years ago a child was brought to me for some cerebral trouble; I made an examination of the case, and pronounced it hypertrophy of the brain.

The case belonged to a highly strumous family, and, besides the increased dimensions of the head, the child was blind. I treated him at my clinic for a whole year with iodides. The result was entire cessation of convulsions and complete restoration of vision.

In January last the cerebral symptoms again appeared, convulsions again occurring, and continuing up to the present time. In his rational moments he complains of a bursting feeling in his head, and has projectile vomiting.

It has occurred to me on many occasions, while witnessing his suffering, that if his head could be split open he would have immediate relief. I would like to ask the members of the Society if any operation of this kind has been made by trephining.

Dr. Vance: I have never heard of this operation being performed in the condition named, but it has been done in a microcephalic child a number of times. If the doctor (Larrabee) has a case of this kind (microcephalic) to operate on, I would be glad to undertake it.

T. S. BULLOCK, M. D.,
Secretary.

THE CLINICAL SOCIETY OF LOUISVILLE.
Stated Meeting March 8, 1892, Dr. P. Guntermann, President, in the Chair.

Dr. J. M. Mathews: I wish to read a history of a very interesting case, which was written by the patient herself, and handed me.

This woman has been under treatment with specialists for her eyes, throat, bladder, womb, kidneys, etc., and they all told her that unless her general health improved she could never get well. Both ovaries and both tubes were removed by Dr. Battey; she was able to walk before that, but has never been able to walk since. Her bladder has received surgical treatment. She now falls into the hands of the fifth specialist. She complains of considerable pain after an action, and has for years passed a good deal of mucus and some blood, she says, principally mucus. Naturally I did not look for any ovarian trouble, but looked for the source in the rectum. I put her on the bed where there was a good light, and dilated the sphincters fully, and I never in my life saw so pronounced a case of proctitis; the whole rectum was involved. I called her husband to look into it. It presented an intensely inflamed appearance as far as I could look, about five inches, and I am persuaded the same condition exists in the sigmoid flexure. I have seen less trouble in the rectum make invalids of people, especially women, than she has. She traces this trouble back to infancy, and though she has passed through all these hands, her rectum as I understand, has never been examined.

The only reason I report this case is to ask, is it possible that all the time the seat of the reflex has been the rectum? I have just put her under treatment to see if I can do her any good; and, if it should be proven that this is the seat of the trouble, the woman will improve under treatment, if not get well. This is the lesson to be learned from the case, that, before an operation on the ovaries, tubes, etc., all other things considered, an examination should be made of the rectum.
She is a very remarkable woman, intelligent and young, about twenty-four years of age. Of course, of good family, and able to pay all these physicians, and she has gone to the best in the country. It is interesting to note the number of physicians that have had her under their charge, and the number of operations upon the woman, without any relief at all.

I have to-day flooded the colon with fluid hydrastis diluted with about four ounces of water; every other day a substitute will be made of sweet almond oil, iodoform, and bismuth. This is my usual treatment.

Dr. L. S. McMurtry: The case related by Dr. Mathews presents many interesting and instructive points, but my remarks will be limited altogether to the operation performed upon the pelvic organs.

The Fellows of this Society are familiar with the fact that Dr. Battey's name is honorably associated with the development of modern pelvic surgery as one of the pioneers in operations upon the uterine appendages. It should not detract from our estimate of his purposes or the originality of his work, when I say that the basis upon which his operation is founded has never been generally accepted in practice, and daily the probabilities of his views ever being adopted generally are growing less. I allude, of course, to the operation performed in this case and known as Battey's operation. Dr. Battey originally called his operation "Normal Ovariomy," and his conception was to cure disease by removing the ovaries and thereby artificially establish the menopause. His idea was, in those cases of pain and reflex disturbances in woman associated with the menstrual function, and irremediable by ordinary means, to remove the ovaries and thereby arrest the function. Pain, reflex disturbances, and excessive hemorrhage, associated with seriously impaired health, were the prominent conditions which his operation was devised to relieve. He was doubtless led to this by the generally accepted dogma prevailing at that time in the professional mind, that many obscure diseases in women were relieved by the menopause.

His first operations were done by making the incision through the vaginal vault. Very soon after Dr. Battey promulgated his method Mr. Tait brought before the profession the fact that the fallopian tubes were often the seat of structural changes irreparable by other treatment than ablation of those organs; that peritonitis (commonly called cellulitis) in woman is usually associated with diseased uterine appendages. He advocated operations upon the uterine appendages for curing positive disease of those organs. Battey's view was to artificially establish the menopause.

About the same time Hegar, in Germany, without knowledge of Battey and Tait, began to work in the same direction, and removed the uterine appendages for disease and to arrest the growth and stay hemorrhage in cases of fibroid tumors of the uterus. As knowledge accumulated, the application of such an operation for the cure of pain and vague neuroses was soon narrowed to a very limited field of questionable character, while the removal of inflamed and suppurating tubes and ovaries associated with peritonitis has grown to be one of the most effective operations known to surgery.

In the case here reported the operation was done by Dr. Battey on the lines of his original conception of the operation, and with an unsatisfactory result. The ovaries and tubes should never be removed unless they are the seat of structural disease, incurable by any other means. The operation in this case, if we may judge by the result reported, did not cure the patient, and hence it only tends to show that the removal of the ovaries for indefinite nervous symptoms is an operation founded on mistaken premises.

The improper application of the operation and the unsatisfactory result should not in any case be used against the proper resort to operation in appropriate cases for the removal of inflamed and disintegrated structures. The operation for removal of the ovaries has been very much overdone and much abused in many quarters, and gynecologists have been most prominent in protesting against resort to this operation in doubtful cases. So far as I am aware no gynecologist does this operation for pain and reflex troubles disassociated with struc-
tural changes in the uterine appendages. Only two months since a young unmarried lady was referred to me by her physician, with the request that I remove the ovaries. An examination under anesthesia failed to disclose any evidence of disease in the appendages, and I declined to do the operation. I had the satisfaction to see her completely recover under appropriate constitutional treatment.

Dr. W. H. Wathen: The rectal disease may have been the cause of all the trouble. She now has, however, such poverty of nerve force that she may not be relieved of all her symptoms when the rectal disease is cured.

Dr. I. N. Bloom: Somebody has mentioned syphilis. I see no reason for suspecting syphilis; see nothing pointing in that direction. There is one interesting point, the passage of gas between the bladder and lower bowels. If I understand correctly, there was a passage of gas between the intestine and the bladder, that she not only felt it, but heard it.

As to the passage of stones from the bladder, this is by no means uncommon in women, and it is not only possible, but extremely probable that a woman run down as she has been should have trouble in this direction. I believe, also, that most of the symptoms mentioned in this case might be present in proctitis. We can only determine this by curing the proctitis. It is possible when this is cured the other symptoms will disappear or become ameliorated so as to show that proctitis was the primary cause. I do not understand sufficiently well how shock could have so exhibited itself as to prevent her walking. I do not know what is meant by it.

I should like to hear from this case in the future, would like to hear result of the treatment, and of the complete recovery of the patient.

Essay by Dr. A. M. Vance, subject, "Treatment of Cold Abscesses."

In the treatment of cold abscesses one will follow the old aphorism in pathology: "The longer a cold abscess remains unopened, the better it is for the patient;" another will incise it so soon as discovered, while the third will open, irrigate, and endeavor to treat it aseptically. I wish to recall a treatment which lies between the extremes, and offers more, I think, than either, as it makes either of the above methods possible later in the case, with a great probability that the abscess will be cured without ever being opened, except with the needle of the aspirator.

I began some ten years ago the systematic aspiration of cold abscesses with the sole idea of keeping them within bounds, so when an opening was made less constitutional disturbances would result, because there would be in consequence of the frequent emptying much less area to be infected. This was before the antiseptic treatment had been established in practice.

I soon found that quite a proportion of the cases were cured, and ever since I have practiced it with a view of getting rid, entirely, of the condition without opening. I think that three out of five cases of spinal or hip abscesses can be cured by repeated aspiration; even in those cases where the abscess opens the outcome is much better because of the frequent emptying. The area possibly to be infected is kept at a minimum, and the pressure effected is much lessened.

I have never used the additional treatment of the injection of iodoformized oil. The aspiration should be repeated as often as any fluid can be found, and as early as possible after the diagnosis is made while the sac is still subfacial. After the second or third aspiration, the material becomes more serous, and in several instances clear serum has at last been drawn off. Firm pressure is made over the part after each tapping, and the mechanical treatment of the condition causing the abscess is carefully looked to.

It sometimes happens that the contents become caseous and will not pass through the largest needle; usually this occurs in old accumulations. In two or three instances in which I have failed to empty the sacs from the above course, the abscess has completely disappeared without further treatment, part of the contents having been removed in each case before the needle becomes clogged. How to explain this I do not know. Ordinarily they have to be incised and cleaned out.

The aspiration can be done without general
anesthesia, and even the slight pain from the injection of cocaine can be prevented by the use of a little salt and ice at the point of puncture. I have used simple aspiration in other conditions which we meet with gratifying results. In all accumulations of fluids in synovial sacs, particularly of the knee, not only in subacute and chronic, but in acute inflammation, have I seen much relief come and a more rapid cure result.

My experience teaches me that few surgeons make any distinction between a cold abscess and other abscesses which contain true pus, the result of external infection. We are now aware that these abscesses, the result of chronic bone disease, and sometimes without this condition, do not contain real pus until they are infected from the air, hence there is greater danger in opening them, and consequent need of some treatment where this is not necessary.

Dr. W. C. Dugan: The question of getting rid of tubercular matter is certainly a very important subject. Of course, under the usual treatment, where the abscess is laid open and treated properly by thoroughly washing with bi-chloride of mercury solution, to get rid of all broken-down tissue, powdering the entire surface with iodoform and applying an aseptic dressing, we can reasonably expect to get a cure.

Dr. Vance is one of the pioneers in this line of treatment, and has thrown not a little light upon the subject. I would like to have Dr. Vance extend his treatment a little further and use iodoformized oil, and I do not think he would have to aspirate so often.

Dr. Matthews: I would take exception to calling this condition an abscess at all. An abscess is supposed to be a cavity filled with pus, and here you have no pus. The sooner we get rid of that idea that cold abscesses are abscesses in truth, I think the sooner the treatment would be accorded them which is necessary and proper. I suppose Dr. Vance will admit that the term cold abscess is a misnomer and is misleading; such a cavity contains broken-down tissue without the characteristics of pus.

I can not see any danger in thoroughly laying open a cold abscess, or tubercular cavity—do not see why it could not be so treated and thorough union and healing of the wound result. If it is in a joint and the bone is affected, as it would be very liable to be, then it would become necessary, I suppose, to make an incision to remove the bone, and at the same time we would lay open this cavity and dress it antiseptically.

Dr. W. C. Dugan: I want to take exception to Dr. Dr. Matthews' views regarding cold abscesses. If this is not a cold abscess, then what is it? To define an abscess, it is a circumscribed cavity filled with pus. Abscesses are divided, according to certain objective and subjective symptoms, into hot and cold. A cold abscess is oftentimes spoken of as a tubercular abscess. The fluid contained in these cavities, while it presents some physical differences, responds alike to all the tests of pus. You take some from each abscess and give it to a microscopist, he examines it and finds in both the granular cell, and he writes "pus." He next submits it to a chemical test, and he finds acetic acid to clear up the granular matter and bring out the nuclei. He then submits it to Day's test, and they respond exactly alike, so he reports "pus." Now, we ask the pathologist to tell us whether the fluid is from an acute or a cold abscess, and he recognizes for the streptococcus and the staphylococcus, and he finds it present in one and absent in the other. The other he examines and finds the tubercular bacillus, so he makes his report, one is from an acute septic abscess, the other from a cold, tubercular, aseptic abscess. While all pus is unhealthy, it is not all septic. I feel fully justified in this position by the able discussion in the New York Medical Journal by our own countryman, Prudden, on this very question of aseptic pus. He has demonstrated beyond question that pus can and is produced by the tubercular bacillus. It is a very great mistake to regard all pus as a product of the so-called pus microbes. Certain irritating substances when aseptically introduced beneath the skin, and the wound allowed to heal, will under certain conditions result in the formation of what is known as aseptic pus. Since the fluid in the cavity responds to all the tests of pus, what should we call it?
Dr. A. M. Vance: The practical point I wish to make in the paper is this: When these little children come to us with cold abscesses they are nearly always run down in health. We can never tell which one of these abscesses can be cured by aspirating, but we can keep them of a minimum size, so that if one is eventually opened we would have a smaller area to be infected. I believe we can cure three out of five by aspiration, and have time to improve the patient's general health before this takes place.

If we had a thoroughly equipped hospital, I believe I would be rather inclined to open them, but as we have to take them as we find them at their homes, where we can never keep them aseptic, I believe in practicing aspiration. I have cured them with one aspiration; sometimes it takes three, sometimes many. I propose to try the iodoformized oil.

I believe, as Dr. Mathews states, that we will have to change the nomenclature in many surgical matters, and a distinction in the different kinds of pus will be one of the changes. I agree with Dr. Dugan that it is proper to call these abscesses, but there ought to be a handle put on one, or taken off the other, in order that they may be differentiated.

L. S. M'Muntry, M. D.,
Secretary.

Reviews and Bibliography.


This is a concise and very clear exposition of the various procedures connected with natural labor. It contains scarcely a superfluous word, and at the same time nearly all that is attempted is made entirely clear.

The cuts, selected from various sources, are of the most instructive character.

In the description of some of the structures and of the determining forces of certain phenomena in labor, parts can be found that are at least debatable.

Thus the hymen is described as a frill of mucous membrane. That the major part is mucous membrane is not doubted, but in so large a proportion muscular fiber has been made out that this tissue deserves to be classed as an integral part of the structure. The hymen seems to be simply an imperfect partition left by the two bodies of leucocytes employed to tunnel out the vagina, the one from the direction of the vulva, and the other from the uterus. When this partition gets too thin for the leucocytes to back out with their loads, for they must work from the inside where the blood circulates, they must then quit and leave a little of it there. It is then necessarily muscle covered with mucous membrane.

As regards the position of the child, we are tersely told, "The child's back is in front because the concavity of the front of the child fits the projection of the mother's spine better than the child's back. The child lies with its head down simply on account of its weight."

If one should, however, assert that the back of the child occupies for the most part the downward direction for the reason that if the fetal ovoid were divided lengthwise into an anterior and a posterior half, the posterior would have the greater amount of bone and the greater specific gravity, who could gainsay it on any better hypothesis?

Again, as to head presentation, if it is simply a matter of superior weight of the head, why does not the head present the larger proportion of cases during the earlier months of pregnancy, say the first six, when, as Pinard says, "It is universally admitted that the head is at the time the largest part of the fetus"?

Again, if the attitude and presentation of the child is so simple a matter of accommodating surfaces and of gravity, how are we to account for the fact that, as observed by Schroeder, the fetal presentation from the end of the seventh month to the time of labor changes for primiparae in eighty-nine per cent and in one hundred per cent for multiparae? The gravity that controls it must be of a strangely shifting character.

External rotation is, with the author, a simple matter. It is Berry Hart's explanation that he gives, and if the author tries to explain to his class, or to grasp for himself the definite
and ultimate principles involved, he is, doubtless, ready that night to be called up for a case of obstetrics, for he is certainly too much puzzled to sleep.

For prevention of injury to the perineum the very sensible, shall we say the only sensible prescription is time—hold back the advancing part and give time for the perineum to stretch. But in very rigid perineum, shall we not by manipulation in the early stages of the labor relax the perineal structures?

The third stage of labor is to be completed by the Credé method. We wonder if an author, advising his pupil to "press downward and backward, and especially if he sees the figure as Lusk has it in his work, realizes how many women suffer by the brutal efforts made to follow such advice. In a surprising proportion of instances it would seem as if the accoucher (?) were trying to push the uterus through the vulva. Nature placed a contraction band around the equator of the uterus when she devised a method for emptying it, and why should we not imitate her? Nobody pushes on the end of the bulb of a Davidson syringe when he wants to expel water from it, and the placenta responds to pressure in much the same way as water.

There is not much in what relates to the care of the discharges after delivery to encourage a great deal of dabbling in the uterus, and for that we must heartily commend the teaching inculcated.

And so, with almost nothing that is new, and with little that is not true, we close a charming little book in which every thing is well said.

| D. T. S. |

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This contribution to the literature of diseases of the ovaries and fallopian tubes displays a well-trained mind of lofty mold. For once we must copy the preface as a leading feature of the review. "The literature," says Dr. Sutton, "relating to surgical diseases of the ovaries displays a notorious amount of egoism. Nearly every treatise devoted to this subject is mainly a record of personal experience. In some instances self-consciousness has been carried to such a degree that the books consist of little else than the clinical histories of patients coming under the observation of their authors. In the present work a different plan has been followed, for, though the book is largely based on personal investigation, full justice is done to the original work of other surgeons. This is a method rarely followed by those engaged in that section of surgical craft known by the grandiloquent term, Gynecology. . . . Any attempt to put the pathology of extra-uterine gestation on a sound basis is rendered difficult by the large number of erroneous assertions, or, as Jevons styled them, false facts, which abound in the literature of this important subject; they have retarded progress, because it is in-
possible to prove the falsity of records relating to specimens no longer in existence.

"For some years Mr. Lawson Tait has been slowly planning the overthrow of the ridiculous notions taught concerning the pathology of extra-uterine pregnancy. Although fertile in critical methods, by which he has undermined these opinions, he has never objectively demonstrated the reality of his conceptions in such a way as to cause an unequivocal explosion. In the third section of this book I have attempted to assist in this iconoclastic endeavor. The time is not far distant when even teachers of midwifery will wonder how they could ever have believed that an impregnated ovum would grow upon the peritoneum."

Considerable use has been made of facts furnished by comparative pathology, especially such as have a bearing on the nature of ovarian hydrocele, menstruation, and tubal pregnancy. Works like this, laid in a foundation of truth, are a most welcome contribution to medical science, and the example of the author in indicating clearly the limits of operation, and setting his face against the criminal avidity with which so many have sought opportunities for needless and vastly harmful laparotomies, is worthy of all commendation. D. T. S.


This work, the author tells us, contains the substance of a series of demonstrations delivered to students in course of preparation for final examinations, and is intended to be used with the living model.

While we might incline to the opinion that much that is contained in the work could be better taught at the dissecting table than on the living model, this may be the best arrangement for students who are preparing for examination and already know their anatomy. There must indeed be very few so far advanced as not to be profited by a perusal of the work. It presumes too much knowledge of anatomy to be of value to the beginner. D. T. S.


This little work is an attempt to construct a text-book for learners to be used in connection with lectures in class. The author advances the opinion that no one attempts to teach himself science now-a-days, and that all wish to attend lectures and demonstrations. This is double-s quite true as regards botany, and justifies him in preparing a treatise in the form of concise notes and summaries. Though this manual does not enter into diffuse explanations, but affords rather an illustrated digest and general note-book, still to one only moderately conversant with botany it affords very pleasant and satisfactory reading. D. T. S.


While in special scientific value these reports fall behind the best we have seen from Michigan and Illinois, in the liberal spirit displayed as manifested in publishing the proceedings of the annual conferences of State Boards of Public Health, and many other matters that concern all the States alike, it surpasses all others.

No better work is being done in all this broad land than that of the State Boards of Health, and it would be a fortunate thing if a copy of these volumes could be laid upon the table of every legislator in the land. D. T. S.

Transactions of the Ophthalmological Section of the American Medical Association at the forty-second meeting, held at Washington, D. C., May 5-8, 1891.

A well gotten up and attractive volume of three hundred and eighty pages of the work in the section referred to. It may be the begin-
Etiology and Nature of Typhus Fever. Fortunately it can not yet be said that typhus is endemic in this country, though how long we shall be free from it with our present reckless admission of a debased immigration is a question which at best admits only of a doubtful answer. It is still both endemic and epidemic in many parts of Europe, though some of its former favorite haunts, as Glasgow, have been purged of its presence by intelligent sanitary measures. This epidemicoity and the conditions of diffusion are well expressed in the terms so frequently applied to this disease: ship fever, famine fever, army fever, prison fever, etc.; that is, where great numbers of human beings have been massed together under unhealthy hygienic conditions, typhus has ever prevailed with great intensity. It has in past ages, in innumerable instances, been the scourge of armies. In the late war between the Russians and Turks, fifty thousand men are said to have fallen victims to this disease (Thoinot).

It is in an eminent degree both infectious and contagious. Neither sex nor age has any marked influence. Misery, famine, and filth are the most potent predisposing conditions. Marchison's statistics give ninety-six per cent of cases among the inmates of workhouses and the denizens of slums. The worst epidemics in Ireland have coincided with years of famine. The famine districts of Russia are this present year a hot-bed of typhus. The predisposing influence of overcrowding and want of ventilation is everywhere acknowledged. The contagious nature of the disease is attested by the success of prophylactic measures, and, in particular, of isolation of the sick. It is undisputed that typhus is transmitted from person to person by direct contact. Another fact, well established, is its transmission by clothing, by infected ships, houses, furniture, etc. It resembles in this respect the eruptive fevers, smallpox, scarlatina, measles. According to Marchison typhus is most communicable by sick persons from the end of the first week till convalescence.

Numerous researches have been undertaken to discover the germ of typhus fever. The most worthy of mention are the investigations of Hlava and those of Thoinot, undertaken in collaboration with Calmette. Hlava, when studying an epidemic of typhus at Prague in 1888, referred the cause to a strepto-bacillus which he has figured and described. But this strepto-bacillus is by no means constant, and Corriol and Babes think it only a secondary and unimportant micro-organism. Thoinot and Calmette find numerous microbes, and frequently, but not always, the strepto-bacillus of Hlava. They find constantly in the blood of typhus patients "an interesting organism," which they regard as *sui generis;* unfortunately it has not been cultivated. The blood of typhus patients is, they say, not cultivable or inoculable in small animals, as rats, guinea-pigs, hares, etc. It is evident then that new researches are needed before the causal agent can be said to be identified.

Empirically, it has been determined that the air is not a good vehicle for the propagation and transmission of the germ, whose power of extension does not exceed a very limited zone around the sick person. Without direct contact with the patient or with objects that harbor the germ, as clothing, there can be no contracting of typhus (Thoinot). The facts that substantiate this proposition are numerous.

According to most recent authorities, the role of potable water in the propagation of typhus fever is not great, at least as compared with the relation of drinking-water to typhoid fever in the transmission of that disease. Thoinot, whose recent memoir we have studied in this connection, thinks it doubtful whether typhus be inoculable by the digestive tube. He believes that the germ has a special affinity for the secretions of the skin, fixing itself to them and being thereby transmitted in the form of exhalations, or communicated to susceptible persons by touch. It is not definitely known how far the lungs are a medium for the inoculation of the infectious agent.

Thoinot finishes his chapter of etiology with these conclusions:

1. Typhus is, in all probability, the function of a figured germ, whether that described by Hlava, the one studied by myself, or some other micro-organism.

2. Typhus is endemic in certain countries, nor do we know the reasons of this endemicity; whether or not it may be due to the cultivation of the germ in the soil, to the qualities of the races which perpetuate the existence of the germ by slow and successive transmissions, etc. We are very ignorant on these points.

3. Typhus becomes epidemic in certain cases.
and spreads far from its starting place, or invades dense agglomerations of people. The adjunct conditions of the diffusion are overcrowding the general condition, and physiological deprivations (misère physiologique), a personal condition, which may, moreover, be generalized to a collection of individuals, as in cases of tribal or natural destitution and of famine.

4. Typhus does not always leave behind a focus of endemicity when it invades an army or a country epidemically, in this respect resembling cholera.

5. The transmission of typhus is effected by direct contact with the patient, or by contact with objects which are charged with the specific germ from intimate contact with the patient.

6. The channels of inoculation of the disease, as also the channels by which the germ is expelled from the sick organism, are unknown to us. It is probable that the products of cutaneous excretion play a principal rôle.

7. The air does not appear to be a vehicle of contagion, and the same may be said of water.

**Boston Med. and Surg. Journal.**

**Tracheal Tugging as a Sign of Aneurism.**—The value of "tracheal tugging" as a sign of thoracic aneurism has been investigated by Mr. Harold Grimsdale, of St. George's Hospital, who has communicated the results of his investigation in an interesting paper in the current number of The Practitioner. This sign, it may be recalled, was first mentioned by Sergeant Major Oliver in a letter to this journal in 1878 (vol ii, p. 406), and it consists in the sense of downward traction of the larynx with the systole when the thyroid cartilage is gently raised between the finger and thumb. But little attention was paid to the sign until last year, when we published communications from Dr. McDonnell, of Montreal, on the subject (The Lancet, March 7th and 21st, and April 4th), and since then the observation has been frequently confirmed in connection with aneurisms of the arch which impinge on the left bronchus. At a recent meeting of the Clinical Society Dr. F. Taylor showed a case which presented the sign in question. Mr. Grimsdale, while admitting that the sign is of value, being perhaps one of the earliest indications of an aneurism in the above situation, shows clearly that it is a phenomenon which is frequently present in the absence of any aneurismal dilatation of the vessel. In conjunction with Dr. Ewart an examination was made of one hundred and eighteen hospital patients, among whom no fewer than fifty-one presented "tracheal tugging," the males preponderating.

They noticed, however, degrees in the extent to which the tugging took place, and of four cases in which it was "marked" two were cases of aneurism of the arch, one of emphysema and bronchitis, and one of chlorosis. Seventeen cases showed "moderate" tugging, twenty "slight" (including one of probable aneurism of the ascending aorta), and seven "very slight." It is especially noted that of ten cases of mitral disease the sign was present only in one. In four of aortic valvular disease it was present in three. It was also present in only one of five cases of phthisis. It was increased by exercise and excitement, was synchronous with the cardiac systole, and almost always more marked during inspiration than during expiration, an exception to this rule being a case of emphysema, in which it was very marked during expiration. In discussing the modus operandi of the phenomenon, and endeavoring to harmonize some of the apparent anomalies as regards its presence or absence, Mr. Grimsdale inclines to the belief that it depends upon the aorta being brought into contact with the left bronchus during inspiration by the downward and forward displacement of the heart. He found further that it decidedly preponderated in people with full chests and prominent infraclavicular regions, while in the flat chested and stooping patients it rarely occurred, even under excitement. It would seem then that as a positive sign of aneurism even marked tugging may not be absolutely diagnostic, but its absence certainly denotes absence of any gross dilatation of the part of the vessel near the left bronchus. The best plan to obtain the sign is for the observer to stand behind the patient and to gently raise the trachea by the tips of both index fingers placed beneath the cricoid cartilage.—*London Lancet.*

**A New Method for the Retention of Intra-uterine Stem Pessaries** (*Gaz de Gyn., July, 1891*).—The author quotes Schulze as saying that the object of the intra-uterine stem should be the reduction of flexions and the re-establishment of a normal cervico-uterine canal; when this is accomplished, the dysmenorrhea, endometritis, and sterility dependent upon the flexion will disappear.

To be at the same time efficient and innocuous, the stem should be aseptic, and should in no way interfere with the normal movements of the uterus, nor be the cause of the slightest injury to the uterine mucosa. Le Four uses a solid cylindrical stem, made of aluminum, about five millimeters in diameter and five millimeters shorter than the length of the cervico-uterine canal. Upon its surface are four longitudinal grooves, which permit the discharge of the
menstrual fluid and mucous secretions. There is a small transverse canal about five millimeters from one of the ends, both of which are blunt.

The cervix is dilated by means of a laminaria tent and carefully disinfected, after which the stem pessary is removed from a sterilizer and inserted. The perineum is depressed, the vaginal walls held apart by retractors, and the cervix brought down with a tenaculum. A curved needle, threaded with silkworm gut, is inserted through the left commissure of the cervix (about five millimeters from the opening), passed into the little transverse canal of the stem, and through the right commissure of the cervix. The two ends of the silkworm gut are now tied in the center, and the stem is maintained in position, but free to follow the slightest movement of the uterus.

Lefour has applied the foregoing method five times, twice for the cure of atresia consequent upon the use of chloride of zinc pencil, and three times for anteflexions. He reports the cases at length; in one of them, where the dilatation of the cervix was attended by exquisite pain, he impregnated the laminaria with a solution composed of

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<tr>
<th>Substance</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Sulphuric ether</td>
<td>5 drs</td>
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<tr>
<td>Iodoform</td>
<td>5 drs</td>
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<td>Pure cocaine</td>
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and left it in place eight days, completely overcoming the sensitive condition.

The results in all of the cases were satisfactory.

Inebriety.—In most cases inebriety is a self-limited disease. The drink symptom dies out naturally, or concentrates in some other form of morbid impulse. Any remedies or means used at the time of change will be credited as curative. The cessation of the drink impulse is not followed by full restoration, yet the impression prevails that total abstinence is a sign of cure always. Many pronounced paranoic and diseased persons who have abstained from alcohol are posing as examples of cure from this or that means or remedy—persons in whom the drink impulse has died away naturally, no matter what remedy may be used. This is evident in the common class of those who sign the pledge or profess conversion many times, only to relapse after each occasion. Finally, in apparently the same circumstances, they go through the same formula, and the drink impulse disappears forever.

The real facts are that some organic brain change has taken place, the desire for alcohol ends. Other morbid symptoms may come on, but this disease has subsided or taken on new forms. The bark remedy, the mind cure, hypnotism, or any of the so-called specifics that are followed by a cessation of a drink impulse, are all examples of this change. Physicians of asylums recognize this, and direct all their efforts to build up and bring the patient back to a normal physiological life, in expectation of the final cessation of the drink symptom and restoration of the organic processes. This result may come on any time, and the object of all treatment is to encourage this, and remove the conditions which seem to provoke the drink symptom.

Drugs or restraint which holds the drink symptom in abeyance are never curative, and when followed by a subsidence of this impulse it is an accidental conjunction of the natural dying away or change of brain function and growth. When such change occurs after long treatment in the best physiological and hygienic conditions, it is reasonable to suppose that these means have contributed more or less to this end. But when this subsidence follows in conditions opposed to this, and from means inadequate to change or alter organic action, clearly some other forces are at work.

The self-limitation of inebriety, and the natural history and progress of the disease are yet to be written.—Quarterly Journal of Inebriety.

The Foot-and-Mouth Disease.—The Government officials have evidently not succeeded in repelling the invasion of foot-and-mouth disease alluded to last week, for up to the present date there have been outbreaks in different parts of London and Kent, one of them as far distant as the Isle of Sheppey. There is much reason to fear a further extension, as the origin of some of these outbreaks is difficult to trace. It would almost appear as if the malady had obtained a foothold in London before the arrival of the incriminated Danish cattle, for the Government of Denmark has intimated that it is not present in that country; therefore the infection could not come from that quarter of Europe. Already the invasion has caused much inconvenience, hardship, and loss, and in view of the fact that there are now only four small countries from which live cattle can be safely obtained (Sweden, Norway, Spain, and Portugal), the question may well be asked why the importation of living beasts should be tolerated at all. The animals are generally subjected to much suffering in transit, and, considering that contagious disorders are so rife among them on the continent, great risk is always incurred of having infection brought here with these importations, as in the present instance. It would be far better to depend upon dead meat from abroad than live stock importations. Should the malady become prev-
TREATMENT OF YELLOW FEVER BY COLD.—

It is well known that yellow fever never develops in a cold or temperate climate, and several attempts have been made at various times to apply this fact to the treatment of the disease in tropical climates by artificially cooling the patient. Thus, some thirty-five years ago, trials were made with a cold chamber, the air of which was charged with oxygen, but without appreciable success. Quite recently Dr. Garcia has reintroduced a somewhat similar plan, an iced chamber being constructed so that the air within should be maintained at a temperature varying from 32° to 50° F., and nearly saturated with moisture. A fair trial was made with this at the works of the Juragua Iron Company in Cuba, where an epidemic of yellow fever had broken out, seventeen well marked cases, in all of which black vomit was present, being treated by means of the “polar chamber.” Eleven of them recovered, the mortality consequently being at the rate of 35.3 per cent, or about the same as the usual rate of mortality at the mines under other methods of treatment. The course and duration of the disease did not appear to be in any way modified by the low temperature. The urine, though in some cases considerably increased, was not altered quantitatively. The phenomena depending on aeholia occurred in the same manner and at the same period as in cases treated in the ordinary way. The same may be said of the gastric hemorrhage. The cost of a patient’s treatment by cold was found to amount to about $100.—Ibid.

UNUSUAL PHENOMENA OF EPILEPSY.—In an interesting address, Wilks (British Medical Journal, No. 1618, p. 2) reports a number of unusual phenomena observed in connection with epilepsy; the significance of which might readily escape the unobservant. He takes the view that the association of loss of consciousness, convulsions, and coma is not an essential feature of the disease. In some cases there is only a strange feeling in the limbs or a sudden pain in some part of the body; in others, there is an aberration of the senses or a perturbation of an important organ; sometimes there is only a strange mental disturbance. Sometimes the aura constitutes the main symptom of the attack; suspicion should be aroused if a patient complains principally of a sore tongue. There may be aberration or confusion of mind, the patient committing acts of which he subsequently has no recollection. The special senses or motility may be transiently impaired or lost. In some cases, coma or sopor may be the only discoverable manifestation. Sometimes it would appear as if the attack were long drawn out; that is, instead of being shock-like and intense, it is protracted in duration and correspondingly mild in intensity. Wilks is averse to admitting any relationship between epilepsy and migraine. In his experience the one does not replace the other; nor are both common in the same family. In the one, the onset is sudden, with convulsions, dilated pupil, congestion, and often heat of body; in the other, the onset is gradual, with contracted pupil, cold skin, and sickness. According to the observations of Wilks the epileptic does not suffer from headache.

OBSERVATIONS IN REFERENCE TO THE USE OF ICHTHYOL IN FEMALE DISEASES (Der Frauenartzt, Hft. 9, 1891).—Observations made by Obersch do not agree with the excellent results reported by Freund. O. reports forty-two cases treated with ichthyol. Of these thirty-five were cases of chronic inflammatory swelling of the appendages, and four parametrical exudations. His conclusions were that ichthyol does not have a specific effect upon inflammations about the uterus, nor does it cause resorption of the products of inflammation. He did observe, however, that it quickly diminished the amount of pain. His favorite manner of using the drug is as a five-to ten percent ichthyol-glycerin on tampons.

[I have used this drug in a number of cases of endometritis, endocervicitis, and exudations. A five- to ten-percent ichthyol-glycerin solution is applied directly to the affected surface. Tampons soaked in the same solution are then introduced into the vagina and kept in situ twenty-four hours. Besides this the abdomen directly over the symphysis is rubbed twice daily with a fifty-per-cent ointment of ichthyol. In the cases observed thus far the results have not been very satisfactory.]—Oberth and Z. S. R., American Journal of Obstetrics.

FOR RHEUMATISM AND LUMBAGO.—Hollister gives the following in doses of 1 teaspoonful three or four times a day (National Druggist):

- Potassium iodide .......... 15 gm.
- Potassium bromide .......... 15 gm.
- Tincture of colchicum seed .. 30 gm.
- Syrup of bitter orange peel .. 50 gm.
- Distilled water .......... 150 gm.

M. The dose should be augmented until the bowels are moved.
The American Practitioner and News

"NEC TENUI PENNA."

Vol. 13. SATURDAY, MARCH 28, 1892. No. 7

D. W. YANDELL, M. D. H. A. COTTELL, M. D. Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price $3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

Books for review, and all communications relating to the columns of the journal, should be addressed to the Editors of the American Practitioner and News, Louisville, Ky.

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UNIVERSITY OF LOUISVILLE.

The commencement exercises of the Medical Department of the University of Louisville took place in Macaulay’s Theater, March 14, 1892. The degree of Doctor of Medicine was conferred upon one hundred and sixty-two gentlemen by the Hon. J. S. Pirtle, President of the Board of Trustees. Judge Pirtle said:

Gentlemen: The University welcomes you to the fold of her children, and, with that partial affection with which a parent ever regards his youngest born, wishes you success in the pursuit of your profession. You are the very flower of our efforts to make this medical school a true exponent of the best methods and principles of teaching medical science. Each year in the fifty-four which have passed since this school was established, it has been the ambition of the Faculty and the Trustees to improve upon preceding methods, and thus we have ascended to the present highly developed and perfected plan and mode of instruction. Let us not despise the ways and the work of our predecessors. As we are doing now, they did in their time the best that could be done. But that which was good enough for them, and as good as could be produced, is not so for us. With the immense strides which have been made in our time in the fields of all knowledge, it has been necessary to require more of the student and to give more to him. You have been submitted to a longer course of preparatory study, and to a more extended course of lectures than any class which has received the degree of Doctor of Medicine from this University. Your successors will have even more required of them. The increased intelligence of the whole country demands that the doctors likewise shall have more education than has been needed heretofore to fit them for beginning the study of the profession. The years of study have been increased to three, and the number of months of lectures largely added to.

The facilities for acquiring knowledge of medicine are, we believe, as good here as in any school in the United States, and with the standard of graduation raised to the point I have indicated, there is no reason why a student, however ambitious, may not here fit himself for any branch of practice. As new methods of instruction are developed and found to be improvements, we shall adopt them and keep ourselves abreast of the times in every respect. The Board of Trustees feels a just pride in the superior talents and accomplishments of the Faculty, and from the high recommendation they have given you, gentlemen, we look forward to the added luster which your achievements in medical science will reflect upon our University.

In this centennial year, particularly interesting to Kentuckians as the completion of the first hundred years of the existence of the State, the mind turns back and reviews the history of human progress since 1792. How vast the change, how wonderful the gain! That which lies beyond the beginning of the hundred years seems ancient. The emancipation of thought and the freedom of mankind, as far as accomplished, the wealth of knowledge have come and grown and developed into strength almost in our own time. In all departments of learning progress is observable, and in none more than in the profession of medicine. The roll of American physicians contains names eminent over the scientific world and ranked with the most distinguished in Europe.

To this noble profession, with all its capabilities and possibilities for good and for fame, you have this day come. Let your efforts to win its honors and faithfully to perform its duties never relax. You have great opportunities. Prove yourselves worthy of them.

The following is a list of the graduates:

Armes, S. H., Ky. Butler, G. H., Jr., Tenn.
THE AMERICAN PRACTITIONER AND NEWS.

Cook, O. H., Ind.
Carleton, J. C., Tex.
Chalk, N. T., Ky.
Crawford, C. W., Tex.
Clemens, J. D., Tex.
Cass, D. S., Ohio.
Collins, C. C., Ind.
Cloud, R. B., Ga.
Cross, G. W., Tex.
Cooper, W. A., Tex.
Cornelius, P., Ky.
Dann, M. C., Ky.
Davis, E. C., Ga.
Daniel, C. T., Ky.
Domho, S. P., Tenn.
Davis, D. F., Ind.
Dula, P. H., N. C.
Eaton, B. G., Ala.
Fox, B. G., Ariz.
Finley, F. W., Ky.
Fountain, W. K., Ala.
Guernsey, T. L., Ind.
Gittelso, S. J., Col.
Garrett, A. E., Tex.
Gardiner, R. L., Tenn.
Hale, R. A., Ill.
Howard, C. E., Ky.
Harle, C. S., Tex.
Hotopp, T. M. H., Ky.
Hovard, W. M., Ind.
Harneel, E. C., Ky.
Hurst, J. A., Va.
Hon, A. W., Ind.
Hyer, J. E., W. Va.
Holeman, J. T., Kan.
Hollcroft, E. P. T., Ind.
Hix, R. W., Tex.
Hairston, T. H., Tex.
Huffaker, R. O., Tenn.
Ikeld, C. E., Ind.
Iml, E. S., Ind.
Johnson, F. O., Tex.
Joiner, J. C., Tex.
Jones, C. Ky.
Jones, E. H., Tenn.
Knolle, R. L., Tex.
King, J. M., Ark.
King, W. J., Ark.
Kindred, E., Miss.
Kilpatrick, T. F., Miss.
Kelley, M. J., Ky.
Lamb, W. J., Ky.
Loesch, G. E., Ind.
Loue, J. J., Ill.
Long, O. M., Mo.
LeGrand, G. F., Tex.
Lain, G. D., Tex.
Lynch, M. C., Tex.
Lee, J. R., Ky.
Long, T. E., Ky.
Lain, A. S., Tex.
Long, J. A., Ohio.
LaTour, A., La.
Longsdon, F. M., Tex.
Lackey, J. M., Tex.
Murphy, W. T., Ky.
Moore, G. M., Mo.
Markle, G. C., Ky.
Meguire, T. D., Ky.
Moore, H. A., Mo.
Moulton, S. M., Minn.
Meador, L. Tex.
McDonald, J. W., Tenn.
McFadden, L. M., Ohio.
McCune, J. T., Mo.
McCormick, S. H. I. T.
O'Brien, J. J., Ky.
O'Rannon, J. B., Ky.
Oltenburg, H. S., Miss.
Proctor, D. E., Ky.
Phillips, F. L., Ky.
Phares, T. W., Ala.
Piper, C. E. O.
Phillips, J. R., Ky.
Parker, J. W., Ky.
Preston, J. F., M. D., Kan.
Parrtridge, O. F., Miss.
Parkinson, W. B., M. D., Utah.
Rolph, E. L., S. D.
Read, C. M., Col.
Rodgers, W. R., Tex.
Ramsbrok, C. R., Ind.
Rankin, R. W., Ky.
Renick, W. L., Mo.
Rush, J. C., Miss.
Smith, G. C., Ky.
Spangenthal, J. H., Ky.
Sullivan, R. R., Ky.
Shelton, J. H., Ky.
Stokes, E. B., Tex.
Saling, W. J., Ky.
Strother, W. H., Ky.
Simons, A. A., Ky.
Scrivner, J. F., Ky.
Settle, J. B., Ky.
Sutherland, L. D., M. D., Ark.
Simpson, C. J., Ky.
Taylor, B. M., Ky.
Thompson, W. R., Ky.
Tomlin, W. S., Ind.
Templeton, C. V., Tex.
Tipton, W. L., Va.
Tarr, G. H., Mo.
Violett, C. C., Ky.
Van Dyke, W. H., Ky.
Van Cleave, C. J., Mo.
Windell, J. T., Ind.
Witherspoon, J. T., Ky.
Walker, J. F., Ala.
Willingham, E. B., Ky.
Young, I. C., Ill.

The class valedictory was delivered by Dr. T. D. Meguire, of Kentucky, as follows:

We are entering upon our life-work in a most remarkable period. Though proud to be called the heir of all the ages, yet this generation has added to the store of human knowledge, especially in the way of scientific researches, more than all the generations that have gone before, and more than in all preceding generations has there been recognized the brotherhood of man: not only in the matter of common origin and common political rights, but in religions as well.

Liberty has spread her wings over many a fair land. Charity has searched out with tireless feet and patient eyes the abodes of misery and pain. Along with tyranny in the State religious bigotry has well-nigh lost its ancient hold, and lofty minds in every land, embracing every creed, are now declaring that all nations, by their natural relations to their Creator, are partners of the revelations that are a guide to the things that make for the spiritual good, and that, whether a prayer ascends from crecent or cross, from Guatama’s temple or fuse of Thibet, it has like audience with the Di- pesner of all Blessings. Science, far-reaching in her endeavors, allows no day to pass without unfolding some new surprise. Surely this is a day of large liberty, a favored time in which to live.

But the picture has a dark side as well. It can no longer be denied that social order and good government in this country are seriously threatened. A wild and growing scramble for wealth seems to engage the energies of the country to the exclusion of all that makes for patriotism, for justice, for the highest humanity. Success in getting wealth has come to be regarded as the highest merit. How often do we see the public bend the supple hinge of the knee to the millionaire, though he be known to be a public plunderer, while it passes by with indifference or actual neglect the man without means, though he should be an exemplar in honor, in truth, in learning and culture. The effect of thus joining by common consent in the rewarding of successful dishonesty is to bring out what is worst in every nature. The moral gait of business seems to have been set by the dishonest, and however well-meaning the new entries in the race may be, that gait they must go, or fail.

The man who puts his rejected goods upon the mar-
ket and sells them at a sacrifice can not compete with his neighbor who stacks his rejected goods in his cellar and sells them at two prices to the insurance companies. The honest man must either go out of business or learn the road to the same market.

Trusts, made up often by men of prayers, yet more rapacious than the followers of De Soto, monopolize the necessaries of life and strip those who are not in their conspiracy.

Does it not seem that this is an age when truth and justice go down in the presence of might in evil? Are there indeed, then, no honest people? Yes! far more than the world has seen at any former period. More lovely characters; more of all that is good in man. The very fact that society stands gives proof of this. How else could this wide-spread system of rapine and plunder endure, if there were not a class of honest, toiling, self-sacrificing, simple-minded people! It is only when wolves have lambs to eat that the feast goes on thus quietly. But what may we expect when their hungry jaws are turned upon each other!

If this dreadful tendency is to be arrested by peaceful means, and not wiped out in blood, if example and argument and persuasion are to bring about what every good man desires, no class of men, except the clergy, have the opportunities of effective work offered them that are vouchsafed the medical profession. The doctor comes into contact with all orders of society. He has constant opportunities to treat true worth with the respect it deserves. If himself a man of integrity, it behooves him to refrain from obsequious demeanor toward wealth, that he may have no share in inciting men to dishonest gains. But above all his own life and professional methods must be above reproach.

His patients trust him implicitly; he must never take advantage of that trust. As one goes to the watchmaker and expects him not to tell him that a jewel is out when only the spring is weak, so the doctor is, in the mart of high honesty, required never to treat ailments that do not exist, or charge for work that is never done. And this, all the more, when he reflects that he has an advantage of his patients that no other workman has over his patrons.

From this we gather that it is the part of honesty that the physician shall qualify himself by every means in his power to do all for his patients that medical science can accomplish. Thus equipped for our life-work, let us maintain our integrity with a conscience and courage that the ill-disposed may hate and fear.

In a few short hours we shall be, many of us, speeding away to our distant homes in every part of this vast country. And soon, Hope tells us, we shall be responding to the calls of suffering humanity. Some under the bright skies or quick-chilling "northers" of the Southwest; some upon whose beauty-lov-
progress is mainly dependent upon the "practice of the profession itself." The physician is compelled to observe his cases carefully; to make memoranda of the good or bad results of a particular mode of treatment; to read medical works to profit by the wisdom of the past, and to observe closely so as to discover new methods, and new agents to fight a particular disease. By his profession, he is obliged to support himself and his family, therefore he must endeavor to diagnose his cases correctly, and devise the most successful treatment.

While a great deal of devoted and unselfish time, research, and investigation is given by medical men to the development of the Medical Science, how little attention and consideration the general public gives to the physician himself! It wants the best fruits, and yet gives no heed nor care to the trees and the garden. Medical Science is the fruit of our intelligence, it is a branch of our intelligence; but the condition of the trees in the garden, where we are to cultivate good fruits, never comes into the mind of the medical world. Each and every tree must struggle for itself, otherwise it will be thrown out of the garden. I think it is about time that physicians should begin to see where they stand, what work they are to do on earth, and whether they are able to accomplish this great work. Again, is it not now time to see that the great work of the physician should not be an outcome of his struggles in life, but of purely moral and scientific origin. We demand of him the development of science; to study medicine; to read journals; to join medical societies; to pore over countless articles; to go to hospitals; to see operations; to buy books; to buy periodicals; to buy surgical instruments; to examine his patients thoroughly; to make a correct diagnosis; to be careful in obstetrical work; to write prescriptions carefully; to consult his books in all cases of importance; to keep his office hours strictly; to attend to his patients regularly; to be ready for any emergency; to go promptly at night, when called; to be charitable; to not sue for non-payment of his fees; to keep accounts; to support his family; to dress himself as a "doctor;" to not keep away from society.

This is too much, entirely too much, for the poor physician. He must be rich, he must be educated, he must have seventy-two hours' time to accomplish a day's work, and even then it would be almost impossible for him to fulfill all these requirements. Now, what are the remedies to overcome these difficulties? In the first place he should be furnished with a salary, and his time of occupation should be regulated; and, secondly, we should methodize the general study of medicine. Let us take the first problem, how to regulate the physician's income and his vacation. A proposition was recently made by a medical journal, that it would be a good plan if the physician, instead of taking his fee for each visit, should let the people come under his care for a sum of $20 yearly per family, and, according to the journal, the average income for every physician of the United States would be about $3,500. The plan is theoretically a good one, but it could never be carried out, and it would lead to still worse results than with our present "Fee System." We know that a physician must pay for his bread and butter as well as any other man; must pay rent, pay for clothes, support a family, etc.; so the less popular "M. D.," not being able to get in as many families as would pay for all his necessities, would have to take in families for a much less amount, as is done now in some localities of New York City, where physicians undertake to treat whole families for the sum of $2 to $2.50 per annum, or practice under the old "Fee System." Moreover, it would seem quite impossible to make people pay the doctor a certain sum of money in advance for future medical advice. Then again, would it be possible for the poor workingman, whose wages do not exceed $7 or $8 a week, having to support a family of six or eight, to pay the doctor the sum of $20 in advance? I think that he would rather wait until some one of his family should get sick, and, after having convinced himself of the danger that threatens the patient, call in a doctor, or, as it happens very often, wait until "God shall help him." On the other hand, would it be equitable that a rich merchant, whose income is about $10,000 a year, should be attended by a physician for a like sum, namely, for $20 per annum? We
thus see that the proposed plan means ruin to the doctor, and could never be carried out by the community. But, in my opinion, there is a method by means of which the regulation of the income of the physician could be accomplished, thus abolishing the present "Fee System." It could be easily executed, and would enter into operation in a very short time, provided it should be approved by both physician and people.

Let the doctors of each and every State form an "Order," with a grand medical board (or call it State Medical Board, if you like). This board should have its subordinate or county societies, which, again, should subdivide into districts. Each district should have a certain number of physicians, according to the density of the population. A physician should have a certain number of patients under his care, or he may be appointed by the Grand Medical Board to a fixed number of families living in his district. Physicians may be subdivided into three classes, according to their standing in the profession: regular attending, visiting, and consulting. By this procedure, if in some cases a few physicians are wanted, as for an operation or consultation, a certain number of physicians could be procured. In this way only would we be able to give the poor man a chance to call in a doctor when needed before he has reached a hopeless stage.

Now, as regards the financial bearing of the question. It would, as already said, be difficult or impossible to induce people to pay in advance a fixed sum of money for future medical advice. But a suggestion would be the following: Let the doctor be an officer of health, as a policeman is an officer to keep order in town, let him be a "sanitary teacher." Every such sanitary officer, or teacher, or adviser should, according to the amount of work he does, be paid by the government of the State a certain salary. Say we have in a city 2,000 physicians, let the average for every one be $3,500, making $7,000,000 a year, which is certainly a great deal less than the same number of physicians earn annually by the present "Fee System." The money should be distributed by the Grand Medical Board as teachers are paid by the Board of Education. The people may be taxed, either according to their income, or each and every one alike.

Having laid out the "modus operandi," let us see the results of our proposed plan:

1. People would not have to spend so much money for medical advice as they do at present; the small sum that the government would disburse would scarcely be appreciated by them.

2. Quackery would be entirely extinguished by these proceedings. The patient goes to the quack for advice, because he gets "the advice together with the medicine," while it would require much more money to consult a physician; and no one can deny that the "self-made doctor" is guilty of murder when the patient, no longer depending upon his "spiritualistic" medicines, fails to be cured by the regular practitioner, whose "treatment has probably begun too late."

3. This would also put an end to the use of patent medicines. A person being a chronic invalid, whose disease may be of such a character that it might be benefited by regular treatment, resorts rather to some "Sarsaparilla" or "Liver Pills," or "Great Blood Purifier" of some ignorant quack, while the disease is continually running its course, until the "Great Health Restorer" sends him to his eternal rest. By taking these medicines he "avoids the expense of a doctor," and "it is exactly prepared for his illness." But if, at any time during his protracted disease, a regular physician could be had free of charge, certainly he would rather seek the latter's advice than "help himself" by being purged to death from some sort of a "Non-Mercurial Liver Pill." The abolishment of the "Fee System" is all that is necessary to save his life.

4. The physician would not have to hope for better times; he would not try to gain the patient's sympathy mainly for the purpose of taking him away from his brother physician, but, getting his regular salary, he would be glad to be occupied in his professional work.

5. Sanitation would be brought to a most amazing state of improvement. Nowadays a doctor, being called to a patient, never takes the trouble to see the condition of the premises; it is not his business, for there are others whose duty it is to inspect the sanitary conditions of
the house, although this may be the real factor of the disease. The contagious diseases, not having the soil for their development, would in all probability become less severe in character, and we would never let them spread as they do at present. Sometimes a physician, being requested to attend a case of a contagious disease, "may run the risk" of not reporting it to the Health Department, because, if he did so, he will surely lose his patient—his bread and butter. There is no doubt that he is not encouraged to find out the cause of the disease, to see whether there is sewer gas in the house, or contaminated water, or bad plumbing. In case he should report the condition of such premises, his patient would be obliged to go to expense and trouble to fulfill the requirements of the law. The result is that an epidemic breaks out, and many lives are lost. Again, is it possible for the Health Department to employ so many inspectors as would be necessary to look after the private affairs of each and every physician? Moreover, if such a patient dies, the cause of his death is never known to the public, and consequently the laws of the Board of Health are entirely useless. The physician may write in his certificate of death anything he chooses: instead of diphtheria, pneumonia; of scarlet-fever, heart failure; of smallpox, peritonitis. Who is to prevent him? He will not report the disease, for the patient might be taken out of the city, or the latter might be in a place of business, which would be shut up by the "Health Department," so he either would lose the patient himself, or he might lose future practice among his patient's friends.

6. Will the physician be more honest in his professional services than he is at present, or not? A physician, nowadays, being called to a serious case of a complicated character, so that he is not able to make a fair diagnosis of the disease, and consequently lay out the exact treatment, will prescribe medicine and direct the patient to do this or that, although his orders might even prove injurious to the patient. Why does the doctor do so? Is he an immoral man? No; he does so because, firstly, he gets his fee—he wants to live; secondly, the people are too poor to procure a consulting physician; and thirdly, he is afraid to propose a consultation, for the family might engage another doctor, who "does not need any consultations." But if two or three physicians could be had in the same district for a particular case, ignorance would never gain the advantage over intelligence.

7. What will become of the medical science? There will be more real progress in medicine, the advancement more rapid and the result will be an inceadable gain to humanity. We know that the young physician, beginning his professional career, finds great difficulty in making a living. What incentive has he to devote his time and abilities in researches that will be for the good of mankind? It seldom happens that physicians meeting one another talk about the science; we hear only the usual inquiries about "good or bad times." But, if they should have more opportunity of coming into contact with each other, if a greater intimacy should exist among them, certainly they would take greater interest in the advancement of the science, and would care for the progress of the profession at large. There would be an incentive and time to read medical works, to attend medical and surgical meetings, etc., and all these would be mainly due to the fact that the physician would not have to suffer physically and morally for his slice of bread and butter.

Having laid out the mode of reformation in regard to the regulation of the practice of the profession and its results, let us take now the second problem: How to methodize the general study of medicine? As our aim is to cultivate a good sanitary and medical adviser, who should be provided with a salary, and do good to the community, it is worth while mentioning the conditions and problems of our medical schools, and of the authorities that create the future "Counselors of Health." If we will look into the system of the study of medicine in our American colleges, we will find that it is more practical than in any of the European universities. But is a physician not supposed to be a man of high education? Is it not very important for a doctor to have a preliminary education before he enters into his great study, which is founded on physical and chemical ob-
servations, constituting the greater portion of our knowledge? Is it not necessary for a physician, who is to make a correct diagnosis, prognosis, and treatment of a disease, to be a man of understanding, reason, and high education? Is there any profession in the world that needs so much skill in fulfilling its requirements as that of the profession of medicine? Any other professional man, after getting his problem, is able to take time for reasoning it out; a lawyer, having a case before him, may consult his books; a clergyman may, before delivering his sermon, read it over hundreds of times; but a physician must have every thing in his head; he must be prepared for an emergency that he may happen to be called upon to treat! For such a man something more is necessary than a couple of years' study in a medical school! How many men are graduating from our colleges who can not even write a prescription correctly, for the want of the knowledge of Latin; or give the quantities of the constituents correctly, for the lack of the knowledge of chemistry. They are only a burden to the community. Again, is it proper that the popularity of a college should depend on the size of the graduating class? Would it not be better to have the medical colleges under the control of the Government; to have fewer colleges, "one system in medicine," competent instructors, that the student should be a graduate of a scientific institution, and then confer the degree of M. D. only upon those who are worthy? Is it not necessary for every physician to have a good hospital experience before he is to be allowed to enter into private practice.

To sum up, I believe that the regulation of the physician's income and time, along with a reformed system of study, would give a grand and noble impulse to the progress of medical science, and then, only then, would the people regard the doctor with respect and honor, while he, being worthy of affection, would fully deserve the divine title of "Counselor of Health." Maurice Bernstein, Doctor's Weekly.

Mortality of the State of New York in January.—According to the report of the New York State Board of Health the mortality in January was greater than that of any month previously recorded, except that of April, 1891, which it nearly equals; it arose from a daily average of 291 deaths in November, of 362 in December to one of 434, exceeding the daily average of January, 1891, by 126 deaths, and that of the entire year 1891 by about 100 deaths. The increase is due to epidemic influenza, what may be termed the third outbreak, which reached its height during this month. Compared with January, 1890, and April, 1891, the two months of the height of previous epidemics, the mortality in early life is less, while that of old age seems to be much greater; from acute respiratory diseases, and also from consumption, the number of deaths is considerably less than in either of the other months. Deaths attributed to diseases of the digestive and circulatory systems are increased. Compared with previous outbreaks, this one has appeared to fall especially upon the aged, the number of deaths of old people being double that of the average for January, and next to that upon diseases of the digestive and circulatory organs.

Dr. Lewis A. Sayre.—On the 29th of February, the Rev. W. R. Huntington, Rector of Grace Church, sent to Dr. Lewis A. Sayre, who is one of his parishioners, the following graceful little tribute in verse. On that day the veteran surgeon, who was born in leap year, celebrated his eighteenth birthday, being seventy-two years old.

Dear Doctor Sayre:

And is it true
That Nature set her clock for you
Some four-and-fifty years too slow?
How clever of her to foreknow
That you would keep yourself so young,
So firm of heart, so sound of lung;
That she would never be detected,
Nor you so much as once suspected
Of being older by a day
Than Leap Year records seem to say!
Eighteen, dear friend, or seventy-two,
Which e'er it be, Good luck to you.

Death after Three Doses of Bromide of Potash.—On the morning of March 3d a bartender, who was locked up the night before in a padded cell in the Hoboken City Prison, while suffering from delirium tremens, died after
having been given three doses of bromide of potas-sium by the police sergeant in charge, no physician having been called in to attend the case. If it is true, as stated afterward by the captain of the Hoboken police, that it is a common thing to give bromide of potassium to delirium tremens patients brought to the station house, without special medical advice, and that this is done in police-stations all over the country, it is certainly high time that such a practice should be put an end to. In this case the City Physician, Dr. Simon, who was hurriedly sent for when too late, expressed the opinion that the man was dangerously ill when taken to the station house.—*Boston Medical and Surgical Journal*.

**Resection of the Liver.**—According to the British Medical Journal for January 10th, Professor Tansini, of Modena, in extirpating a hydatid cyst of the liver, found it necessary to excise a portion of hepatic tissue. There was free hemorrhage from the cut surface of the liver that was controlled by catgut ligatures; the hepatic wound was closed by silk and catgut ligatures, and the patient was well within a fortnight.

The thirty-seventh annual session of the Kentucky State Medical Society will be held in the city of Louisville, on May 4th, 5th, and 6th, next. The meeting promises to be an unusually large and interesting one. Communications, with titles of papers, may be addressed to the Permanent Secretary, Dr. Steele Bailey, Stanford, Ky.

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**Army and Navy Medical Intelligence.**

**Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from February 28, 1892, to March 5, 1892:**

Capt. *Jefferson R. Key*, assistant surgeon, United States Army, is relieved from duty at Fort Robinson, Nebraska, and ordered to St. Francis Barracks, Missouri, for duty, not later than March 28, 1892, relieving *Maj. David L. Huntington*, surgeon, United States Army. *Maj. Huntington*, upon being relieved by Capt. Key, will proceed to New York City, for duty in connection with the Army Medical Board.

Capt. *M. C. Waeth*, assistant surgeon, United States Army, is relieved from further duty at Fort McIntosh, Texas, and ordered to Fort Supply, Indian Ter-

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**SPECIAL NOTICES.**

The bottle of Terraline sent me was highly appreciated, and used by myself most agreeably. It is certainly a valuable therapeutic agent and ought to be extensively used by the profession.

W. R. MONROE.

No. 1724 Bolton St., Baltimore, Md.

**James P. Peeler, M. D., Kissimmee City, Fla., says:** I know of nothing with which I have had better success, in treating the various diseases peculiar to the female, than *Aletris Cordial*. I have used it in amenorrhea and dysmenorrhea with excellent results, and also in ovarian and uterine congestion, and neuralgia, whether from cold or otherwise. I know of no better remedy. *Mr. L.* consulted me about his wife. Had been married four years, and had no children. He was a strong, healthy man, about twenty-eight years of age, and his wife was twenty-four. He was very anxious that there should be an increase in the family, and had twice asked the other physicians at different times giving her medicine for that purpose. I ascertained that she suffered very much with her menses, and frequently had to take to her bed during the time. They were sometimes very scant and at others rather profuse. When consulted it was about a week before her menses would appear. Prescribed as follows:

*Aletris Cordial*....................8 ounces.

Sig: One teaspoonful three times a day.

The husband reported that his wife had the easiest time she had ever had, and suffered no pain. When the next time came the menses did not appear. Two bottles of *Aletris Cordial* were taken, and in regular time they were made happy by the advent of a bright bouncing girl. The above is one of several cases of the same kind I have had in my practice. I have been prescribing *Aletris Cordial* in my practice for about five years, and from its use during that time I have certainly had an opportunity of testing it very well, both singly and combined. When treating females of a weak, nervous, and hysterical condition, caused from uterine derangements, the following will relieve in nearly every case:

*Aletris Cordial*....................8 ounces;

*Celerina* .........................8 ounces.

M. Sig: Two teaspoonfuls three or four times a day.

I have used Terraline in a case of chronic broncho-trachitis, and in one of enlarged glands on the base of the tongue, and benefit was derived from its use in each case: the former, through the systematic effect; in the latter, through its soothing and emollient effect directly upon the enlarged swollen glands. In these cases it should command particular attention.

J. H. CLAIRBORNE.

**No. 10 East 29th St., New York City.**

**Insomnia of Drunkards—**

Bromilda [Battle].................2 oz;

Celerina [Rits]....................2 oz.

M. Sig: Teaspoonful, repeated as necessary.
Original Articles.

VARIATIONS IN THE CHARACTERS OF DISEASES
Within the Past Half Century, as Prevailing in the Ohio Valley and the Bluegrass Regions of Kentucky.

BY T. R. GREENLEY, M. D.

Fifty years ago, and many years subsequently, malarial diseases were very prevalent in the Ohio Valley; in fact the people as well as the physicians expected their recurrence every summer and autumn, and made their arrangements accordingly. Within my own observation, in some seasons there were few families who escaped having some variety of malarial trouble, the intermittent and remittent fevers being of course the most prevalent. The congestive or pernicious chills were not of frequent occurrence, but much more prevalent than they have been for many years. The greatest number of cases of this variety of malarial fever occurred during the autumn of 1846, when I had to treat some dozen cases. That season, however, was the most sickly in the way of malarial troubles I have ever known. I was kept busy day and night most of the time from July to November, and at one time in the latter part of August and first of September for eighteen days and nights in succession I found no time for sleep, not lying down a minute.

The diseases being mostly intermittent and remittent, although in many cases apparently severe, were quite manageable. There was only one death during the summer and fall months. This was a case of congestive remittent.

For the first twenty-five years of my practice in the valley I had but few cases of consumption, in fact, my recollection is that the major part of these were in families removing from the highlands wherein the disease was mostly hereditary.

Both in topography and latitude we were, of course, subject to other diseases incidental to sudden changes of temperature during the winter and spring months. Some seasons we had our share of pneumonia, pleurisy, rheumatism, bronchitis, croup, etc.

During the quarter of century alluded to I do not recollect of having but a few cases of typhoid fever, and they were of the old-fashioned typhoid, occurring during the winter and spring months. The earliest case of so-called typhoid fever I ever saw, occurring in the summer or fall season, was in the year 1875. Since that time I have met with many cases during the summer and fall months. As well as I remember, I made a report of what cases had come under my treatment during the summer and fall seasons of the years 1875 and 1876. I think some eighteen or twenty in all. It was published in the American Practitioner. I regarded the characteristics of this fever sufficiently different from the old-time typhoid to make a slight change in the nomenclature, in this particular concurring with the views of Surgeon Woodward, of the U. S. A., calling it typho-malarial fever. He published the first account of this, said to be new disease, as observed by him in Virginia during the late war. I think the publication was in 1865.

Surgeon Short, U. S. A., also published an account of a fever which prevailed in the elevated regions of Colorado, where his troops

*Read at the November meeting of the Hardin County Medical Society.
were stationed, giving it the name of mountain fever. But, from the characteristics as detailed by him, we can recognize it to be a similar disease to that described by Surgeon Woodward. Some modern writers are inclined to deny the duality of the disease, and criticise the correctness of its nomenclature; but when we consider the seasons of the year in which it prevails, together with some of its characteristics, I think we must acknowledge at least the probability of the presence of a malarial element. It varies in several essentials from what we formerly regarded as constituting the true typhoid fever. The old-time typhoid fever affected exclusively young people, at least none over forty-five years. In it we nearly always had the petechial eruption; the nervous stage accompanied with its peculiarities, as subsultus, jactitation, and muttering delirium; as a rule, diarrhea; and its average duration was from twenty to thirty days. But now the fever has no special respect for age, affecting old and young alike. We rarely see the well-developed petechial eruption; may or may not have the nervous stage, perhaps more than half the cases escaping it, and much more rarely do we have accompanying it subsultus or jactitation. We, of course, may and do have the muttering delirium during this stage. Perhaps more than half the cases escape the diarrhea, and the duration of the disease may vary from ten to fifty days. As to mortality, I do not regard it as being as fatal as the old winter and spring types of the disease. Another difference in the symptoms is its greater variation in the morning and evening temperature. This is another point tending to show its malarial character.

The prodromic symptoms of both diseases are somewhat similar. I have thought the greatest diagnostic difference in the two diseases, by which we could readily recognize the new disease, is the slowness of the pulse in proportion to the amount of abnormal temperature. I have in many instances found the pulse but little above normal in frequency when the temperature marked several degrees of fever. My observation during the last fifteen years in the management of the summer and fall typhoid fever satisfies me that it differs from the old-time winter and spring disease in several essential particulars; that the addition of malarial to its nomenclature is not a misnomer, and that it is comparatively a new disease of our country.

In regard to the prevalence of consumption in the Ohio Valley, my observation is that it is more prevalent than formerly, and that malarial fevers, such as intermittent and remittent, are decidedly less frequent. To be sure this great change may be accounted for on philosophical grounds as well as hygienic grounds. The country has been mainly cleared up, drained, and put in a state of agriculture, by which the causes of malaria to a great extent are removed. But perhaps the cause of increase of typhoid and consumption could not be so easily explained.

When I first learned of the character of diseases as prevailing in the high lands or blue-grass regions of Kentucky, typhoid fever and consumption were much more prevalent than in the Ohio Valley; but they were very little, if any, troubled with intermittent or remittent fevers. At present, however, I am informed they are subject to those diseases, and still retain, perhaps to the same extent as formerly, the typhoid fever and consumption. We are not always able, on reasonable premises, to account for such change as above alluded to, but nevertheless it is a matter of interest that such changes do occur. I would not, however, have it presumed by my medical brethren that from my observations above given I regard malaria as an antidote to typhoid fever and consumption.

At the time when I first could recollect there was no intermittent or remittent fever in the New England States; but in some localities these diseases are now quite prevalent, especially on the rivers. This change, however, can be readily accounted for. In old times their rivers were not obstructed by dams, but now, on account of the establishment of manufactories, dams render many of them comparatively stagnant. In this way malaria has been generated and these diseases have become prevalent.

Speaking of new diseases reminds me that diphtheria was comparatively unknown in the Ohio Valley fifty years ago. I well recollect the first cases that came under my observation,
which was in November, 1865. As to its true etiology there is quite a difference of opinion among medical men. I have regarded it as a filth disease and of endemic origin, and in all the cases coming under my observation, until recently, I thought I could account for it through the unsanitary condition of the premises where it prevailed. The case alluded to as an exception I saw lately, and was entirely unable to say it was due to want of proper hygienic surroundings. It was the first case that had ever occurred in the neighborhood for miles around. There had been no communication on the part of the family with any case of the disease.

WEST POINT, KY.

RECENT MEDICAL JURISPRUDENCE.

BY HENRY A. RILEY, A. B., LL.B.

Murder at Long Range. The Graves murder trial at Denver is probably without a parallel in criminal history. Its result will no doubt be known a considerable time before this paragraph is read, but this can not affect the peculiarities of the case. Never before has murder been attempted in Massachusetts and accomplished in Colorado, fifteen hundred miles away. This, of course, is only possible in the case of poison transmitted by mail or express, and few persons would be likely to drink an unknown liquid received from an unknown source.

That the concoction was supposed to be whisky when it turned out to be a solution of arsenic is the explanation of the willingness of Mrs. Barnaby to drink it, and it is evident that the sender must have had a pretty fair knowledge of the habits of the victim.

There seems to be no difficulty legally in establishing the fact of murder under these circumstances, and the case has been likened to that of a long-range gun fired off in Boston and striking its victim in Denver. In both cases the trouble will be to follow the missile from start to finish.

A Judicial Explanation of Insane Delusions. The following charge in a Nebraska case, turning on the question of insanity, given at the trial, has been affirmed on appeal: "Something has been said in the instructions about insane delusions. It is not every delusion that can be considered an insane delusion. The delusion must be of such a character, that, if things were as the delusion imagined them to be, they would justify the act springing from the delusion. To illustrate: If a person be under the insane delusion that he is the Almighty himself, or is directly commissioned or commanded by the Almighty himself to shoot a particular person that the Almighty has decided must be shot, and is moved by such delusion alone to do the shooting, that would be an insane delusion, because, if true, it would justify the shooting. But if a person be under the delusion that some man has done him a mean trick, and that he ought to be shot for it, and the delusion moves the person to shoot the man, that is no excuse on the ground of insane delusion, because, if the fact had been really that the man had done the person a mean trick just imagined, it would not justify the shooting."

Ambulances and City Ordinances. In Detroit there is a city ordinance that "every ambulance or other vehicle used for the transportation of sick and wounded persons, and animals, shall be entitled to the right of way over all other vehicles." Another ordinance prescribes that no vehicle shall go faster than six miles an hour, but the driver of an ambulance called in a case of urgent necessity drove at the rate of twelve miles an hour, and was arrested for so doing. It was claimed in defense that the six-mile ordinance was not intended to apply to ambulances, as cases might at any time arise when a moment, or at least a few minutes, would mean the saving or losing of a human life.

The court refused to take this view, and said that the plain words of the ordinances must prevail, and that no exemption had been expressed or intended for ambulances. It seemed also to be of the opinion that driving at the rate of twelve miles an hour in the crowded street of a city was dangerous to life and limb, and that an ambulance might cause death as well as save it.

The Deadly Sewing-Machine. The sewing machine must take its place in the list of deadly
agencies together with the toy-pistol, the firecracker, the horse-car, the bicycle, and other products of a ripe civilization. In a recent case in Indiana a woman agreed with a canoe vasser to exchange an old sewing machine for one of newer pattern. The old one was quite heavy, and she cautioned the men sent to take it away, and especially called attention to the top, which would be likely to fall unless the belt was replaced about it. No attention was paid to her, however, and when the men raised it to their shoulders the top did come off. It struck the wall, rebounding to the floor, where it broke into pieces. One of the fragments struck the plaintiff in the eye and totally destroyed its sight. She then brought suit against the sewing-machine company and recovered damages. The counsel for the company presented the ingenious theory that the relation of cause and effect was destroyed because the fragment had not come directly from the machine into the plaintiff’s eye, but had struck the wall first and then rebounded. This plan of making the wall responsible in pecuniary damages was not adopted by the court, and the company was held liable.

**Novel Criminal Defenses.** The Albany Law Journal touches in the following sharp way upon some recent trials: “Within a few days several new defenses in criminal cases have been invented. In Utica, to a complaint for assault and battery, the defendant set up that he was laboring at the time under an acute attack of dyspepsia. In Pennsylvania a tramp in prison, who refused to work, was released on the ground of ‘persecutional mania,’ that is, the hallucination that he was imprisoned and condemned to work solely for the sake of persecution. In Catskill, to an indictment for manslaughter by abortion, the prisoner set up the defense of kleptomania. But it did not succeed.”

**The New York Hospital in Court.** A suit for fifty thousand dollars damages will shortly be tried in New York, in which the New York Hospital will be the defendant. The claim is made that a boy about ten years old was admitted to the hospital, suffering from a broken leg, and that the bandages were very tight, and were not touched for days at a time. When at last they were examined the leg had no circulation and gangrene had begun. The only recourse then was to amputate the leg, and now a suit has been brought to prove negligence on the part of the surgeons.

**Malpractice and Charity Patients.** In a recent New York case a physician was accused of malpractice by a charity patient who was about to be confined. He attended her for three days, and on the fourth was sent for but did not go. As a result of this alleged neglect she was compelled to undergo several surgical operations. In defense the physician testified that he was out of the city and unable to give her further treatment. He also swore that he told his patient to go to a dispensary if she needed further care. She would have been all right, he stated, if she had followed his advice and not tried to do housework while ill. The damages asked for were fifty thousand dollars, but the jury only awarded sixty dollars.

**A Strange Use of the Insanity Plea.** A curious instance of the desperate plight into which murderers are often placed to evolve a satisfactory defense for their crimes was shown in a late case in a neighboring State, where the accused testified that he asked the officer who took him into custody what he was arrested for. On the trial the prisoner’s counsel attempted to ask a medical expert as to the inference to be drawn from the fact that a man had forgotten all about the crime when arrested for it, basing such question on the remark made by the accused at the time he was arrested. The judge excluded the question, and such exclusion was held proper on appeal.

**New York.**

**Benzol in Whooping Cough.—Dr. Robertson, in The Lancet, after an experience of some years, recommends highly the use of pure benzol in whooping cough. He states that he has administered the drug, where convulsions and other complications were fast reducing all chances of recovery, with perfect success in a few days. In adults, where pertussis often assumes serious aspects, benzol has proved equally efficacious. The dose is two minims, in mucilage, on sugar, or in a capsule, for adults.**
EXPULSION OF A FOUR MONTHS' PLACENTA ONE YEAR AFTER THE DELIVERY OF THE FETUS.

BY JOHN L. HOWARD, M.D.
Demonstrator of Microscopical Technology in the University of Louisville.

On the morning of the 4th of August, 1890, I was called to see Mrs. A., aged twenty-one, married a year and three months, with a history of one abortion of three months, five months after marriage. I found the os dilated, and the contents of a pregnant uterus of about four months protruding to such an extent that averting the accident was out of the question. While awaiting the progress of the case I was called out by my horse’s getting into a tangle, and in trying to manage him I succeeded in running off and disabling me for further attendance in the case, and another doctor was called in.

On July 27, 1891, nearly a year afterward, I was called again to see the same woman. On examination I found a mass protruding from the os uteri, which on removal proved to be a placenta of about four months. The patient said she had had more or less flooding at irregular intervals, and had been under treatment for “womb trouble” most of the time since the miscarriage a year previous, and her husband said she had buried the fetus in a cigar box, but had noticed no after-birth.

The patient was positive she had expelled nothing during this period that had the faintest resemblance to an abortion. The expelled mass had every appearance, both macroscopically and microscopically, of a nearly fresh placenta of about four months, with such vascular connections as we would expect immediately after miscarriage.

Schöller has noted retention for eleven weeks, Metz for two and a half months, and Probst for one hundred and three days.

On March 2, 1892, the same woman miscarried a five-months’ fetus with secundines entire, which made the third in two years and eight months. Her sister, aged twenty-one, has a history of five such mishaps in four years of married life—one at seven, one at six, one at two, and two at three months.

Neither of the women have a history of specific trouble, either acquired or hereditary, nor have they any other indication that would point to a cause for the above condition.

I take it, from what I have seen of the families, that the abortion habit was formed during the first year of married life by an intentional abortion.

LOUISVILLE.

Societies.

LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, March 4, 1892, John G. Cecil, M.D., President pro-tem, in the chair.

Dr. D. T. Smith presented a child having a peculiar deformity, an enlargement of the forehead just above the right eye. (Child about six or seven weeks old.) The question is, whether it would be safe to raise the scalp and dissect out the tissue underneath.

Dr. A. M. Cartledge: I think there is very little organization about this enlargement; it might be well to make an incision, when it would probably drain out and get well.

Dr. J. A. Larrabee: I think this is a case of cephalhematoma; it has been my privilege to see a great many of these cases. I suppose this winter I have seen three, and there is not a year that I do not see one or more. I see no reason why you should open this or dissect up the skin; you can expect nothing from such an operation, nor will you find anything to remove. It seems to me it would get along better without any treatment.

Dr. Cecil: Dr. Smith asked me to see this child with him perhaps a month ago; I can not now see any very decided change in it. Dr. Smith opened it at that time. The child was then about three weeks old.

Dr. Cecil: I think the opening was beneficial, especially as it brought the enlargement up out of the eye. We used collodion dressing. I see no objection to laying open such a growth and treating it as an open wound.

Dr. Smith: At the time referred to by Dr. Cecil the swelling hung down over the eye causing considerable irritation and inflammation of that organ, so of course I opened it.
I made an incision in two places, and there was considerable milky discharge. My idea is that it is a congenital deformity, and that it will never go away unless dissected away.

The essay of the evening was read by Dr. D. T. Smith; subject, "Intestinal Hemorrhage in Typhoid Fever."

About the 14th of January I first saw Miss B., a member of the commercial class of the High School, who had been sick for about two weeks with what the family had taken to be the grippe. On examination I found her suffering from a marked case of typhoid fever. The temperature was 103°, and between that and 101° it ranged for the four succeeding days. Diarrhea was severe, and nervous symptoms well marked; otherwise the case presented no discouraging features. I gave her small doses of morphone at times, dilute hydrochloric acid one drop and a half every four hours, with milk diet and sponging when the fever was at its highest. At the end of four days I was called away from the city, and Dr. R. W. Taylor kindly took charge of the case for me, and continued practically the same line of treatment. On the fourth day of Dr. Taylor's care of the case I returned and found that hemorrhage had set up, for which Dr. T. was giving acetate of lead with opium.

He had also continued the bismuth, acacia, and chalk. This was Saturday evening January 29th, and the twenty-second day of the fever. The hemorrhage was not severe during Saturday night, though the stools contained both fluid and clotted blood. Gallic acid, in fifteen-grain doses, was given every hour in the latter part of the night, with morphone. On Sunday morning the bleeding became more severe, and increased in severity until four in the evening. In that time she got two drams fluid extract of ergot, about two and a half drams of turpentine, two drams of gallic acid, with the dose of the night before, having already had about three grains of acetate of lead. For the three hours ending with four o'clock she had three stools, apparently composed entirely of blood, and it was evident that she could not last much longer under the drain. I then concluded to try the effect of flushing the colon with cold water, first to cool the small bowels by the contiguity of the water in the colon, and, second by removing the clotted blood in the upper part of the colon to allow contraction of the arterioles along with contraction of the small intestine. The temperature had now in spite of sponging reached 105°. The colon was accordingly flushed with hydrant water three times in immediate succession. The first time the water came away thick with blood, the second it was still much stained, while in the third the water was only discolored. The temperature was brought down immediately to normal.

From that time on there was no further sign of hemorrhage, but the drain had been too heavy. The respiration became rapid, and the pulse weak and fast. The temperature was kept down until midnight on Monday, when it again rose to 104°, and on Tuesday morning at ten o'clock she died.

The points in the case need hardly be emphasized. The ordinary internal styptics failed, as in severe hemorrhages at this period of the disease they are likely to fail, while the flushings of cold water relieved the case when apparently it was steadily growing worse.

Dr. Irwin: I have had some little experience in this line since I last read a paper on the treatment of typhoid fever, claiming then that I had never lost a case from hemorrhage. I will simply mention a case that came under my observation within the last six weeks. The patient was a young lady seventeen years of age, and had what we would consider an average case of typhoid fever, temperature ranging from 102.5° F. in the morning to 104° at night. There were no signs of any disturbance in the case; nothing to indicate any serious complication until the seventeenth day of the fever, when I was summoned very suddenly one morning, before I had gotten out of bed, to see the patient. She was almost in a state of collapse, and I gave it as my opinion upon examination that she was having a concealed intestinal hemorrhage. I had broken ice mixed with bran applied to the abdomen, and gave her a hypodermatic injection of one eighth of a grain of morphia, also gave her hypodermatically one half dram of sulphuric ether and atropine one hundredth of a grain; in a short
time she began to show signs of reaction. The temperature. I should have stated, had been reduced to 95°, and the pulse to 35, in short she was nearly dead. The family were greatly alarmed, and did not like to see me puncture her skin, as her condition to them seemed to be hopeless; so, afterward, I was obliged to give morphia by the mouth. Two or three hours later reaction took place, and she had an evacuation of blood from the bowels, the first part of which was in hard, dark clots, the latter part being fresh and red. I remained with her all the morning, and about noon the temperature had gone up to 97°; the pulse (which was 35 at the stage of collapse) had then gone up to 56. By keeping her head very much lower than her feet she continued to improve. I ordered her then to have morphia in one-eighth-grain doses by the mouth every two hours, and the ice poultice was kept on the abdomen. About five hours after the alarming symptoms began she had two more evacuations of blood from the bowels, not large, but quite red and thin. I then prescribed Monsel's solution by the mouth in three-drop doses every two hours; she retained it very well, and one hour after taking the first dose she had another small evacuation, which was very dark and clotted, which I thought showed the effect of the Monsel's solution. There was no further collapse, and no more evacuations of blood. By the next morning her temperature had gone up to 97.5° and pulse to 65. She had no further trouble. The Monsel's solution was continued every two hours for the next day, and her food consisted of nothing but milk. She was then sufficiently improved to admit the use of a pillow under her head. On the thirtieth day from the time her fever began she was able to sit up in bed.

One singular feature of this case was, that from the time of the first attack the fever never returned, and she went on steadily convalescing, and made a complete recovery.

As I have stated (in a paper previously read before this Society), I believe there is no remedy worthy of confidence in controlling hemorrhage of the bowels equal to opium. The Monsel's solution I gave with the view of forming a clot, and quite contrary to the view of Dr. Smith, I wished the clot to be retained, as its presence would assist in arresting further hemorrhage. I do not lay much stress upon the use of Monsel's solution in such hemorrhages, but believe that it may have done some good. Opium was the great remedy in this case, as well as in other similar cases in which I have administered it.

I believe that if Dr. Smith had not used so much gallic acid, so much turpentine, and flushed the colon with water, with a view of getting rid of the clot, his patient would have been more intelligently treated, and might not have died had he given opium alone, or some of its alkaloids, to arrest the peristaltic action of the bowels and sustained the powers of the failing heart.

I have had a number of such cases under my care, and in every instance have administered opium freely, and never regretted the use of it, as I have not had a case to die from hemorrhage of the bowels in typhoid fever where I administered it, although I have seen cases of hemorrhage in typhoid fever that died without its use.

Dr. Larrabee: The subject of intestinal hemorrhage in typhoid fever has probably undergone more fluctuation in the minds of professional men than any other subject connected with this disease, that is, any of its complications. I think some deduction should be made from statistics, which teach us a great deal in regard to hemorrhage in typhoid fever: the first is, that this is not a very common complication, that is, to say, eight per cent of the cases having hemorrhage, and that a distinction should be made as to the state of the fever at which the hemorrhage occurs. A profuse hemorrhage from the intestines in the early stage of typhoid fever is almost invariably fatal.

In regard to the treatment, I would recommend the application of cold (either ice or ice water) to the abdomen, and I fully indorse what Dr. Irwin has said in regard to small doses of opium. It seems to me the use of ergot is ill-advised. I have used it because others use it; reasoning would not teach us to use it, and I do not see how it can be expected to control intestinal hemorrhages. Instead of ergot, I should prefer digitalis, as this is known
to produce contraction of the capillaries, therefore it is an agent needed in hemorrhages.

One factor in the etiology of hemorrhage during the course of this and other fevers has not been mentioned. I allude to the so-called hemorrhagic diathesis, which is an inherited diathesis, and the subjects of which are known as "bleeders." It is safe to say that about five per cent of the human family possess this diathesis, and when it is considered that only eight per cent of the typhoid fever cases have hemorrhage, it would appear that this would be an important factor. We all meet with these cases in practice in surgery, in the dentist's chair, and in medicine. I have no doubt that a close analysis would reveal this to be the cause of many such hemorrhages.

As to the significance of hemorrhage in typhoid fever, and the influence as upon the prognosis, much depends upon the extent of the shock produced, the amount of blood lost, and the period of the disease in which it occurs. It has been my observation that hemorrhages occurring near the close of the disease, that is, end of the third week, are not infrequently attended by an entire subsidence of the fever and rapid convalescence. I have also observed hemorrhages at an earlier date than this not proving immediately fatal, that the fever returns and the temperature resumes its former height, and runs a complete course notwithstanding the amelioration of symptoms during the time of the hemorrhage.

Another factor in the production of hemorrhages is the disorganization of the blood by the typhoid-fever poison itself. It is my opinion that hemorrhages occurring from the bowel in this disease, as well as from the stomach in yellow fever, are due to a super-alkalinity of the blood, together with destruction of its corpuscular elements by ptomainic poison; the blood, no longer able to be retained within the vessels, is exuded through their coats. I have, on several occasions, searched for these bleeding points in post-mortem examinations without success.

There can be no doubt that local hemorrhage late in the disease is caused by the sloughing off of the intec-tinal blood-vessels and in the ulcerative process of Peyer's glands.

It was at one time regarded, on purely theoretic grounds, that the application of cold and cold water baths (which was introduced by Jurgison and Liebermeister, and at the present time constitutes the treatment in Germany, for the reduction of temperature) would, by contraction of the superficial capillaries favor intestinal hemorrhage. Facts, however, are more conclusive than theories, and the facts, from records of 883 cases in one instance and 868 in another, tabulated at Berlin and Basle, show that under the partial water treatment the percentage of hemorrhage has been reduced to 6.2, and under the total cold water plan, to 4.2.

As to the therapeutic measures employed by Dr. Irwin and by Dr. Smith, I would say, it is difficult for me to believe that three drops of Monsel's solution, given in half a glass of water every two hours, should find its way unchanged through the stomach, through the duodenum and jejunum, down to the ilium, thus reaching the supposed bleeding point, and act as a local styptic, nor can I see how tannic acid could so increase the coagulability of the blood as to be of advantage when administered internally. These agents applied locally are well known styptics, but their action in this remote manner is extremely doubtful.

Dr. Senteny: I am free to confess that I have not had much experience with hemorrhage in typhoid fever, for the reason I have not seen many, nor had many to occur in my practice. The cases I have seen, I have had very little trouble in controlling with gallic acid, ergot and turpentine, ergot, particularly, with a little opium. My judgment is that hemorrhage in typhoid fever is more commonly due to error in treatment than to any thing else—too much treatment, possibly.

Dr. C. W. Kelly: I have seen hemorrhage from the bowels in typhoid fever, and do not think that it is so serious a complication as we are sometimes led to believe. I fully agree with Dr. Larrabee with reference to the treatment so far as the use of astringents is concerned, except the giving of digitalis in hemorrhage; I can not see his reasoning in this. You must keep your patient thoroughly under the influence of opium; and, while digitalis is my "right-hand bower," I never give it in case of
hemorrhage. The application of cold to the abdomen continued for some time may prove beneficial. I do not believe in the use of turpentine or ergot, nor do I approve of internal injections of cold water. The opium I rely upon mainly because of its arresting peristaltic action of the intestines, because of its power in aiding vital functions, and in doing much that can not be explained. I can not, for the life of me, see how any astringent given by the mouth, going through the esophagus to the stomach, through the duodenum and jejunum to the ilium, a distance of twenty feet by measurement, how it is possible for such an astringent to do good in case of intestinal hemorrhage. It seems to me that any astringent given by the mouth would be so changed before reaching the seat of the trouble that its application would amount to nothing.

I do not think I understood Dr. Irwin correctly in his statement concerning a slow pulse with loss of blood; I take it for granted that I misunderstood him, and instead of 60 it should have been 160. As a matter of course, when we have hemorrhage, the pulse becomes very rapid, the greater the loss of blood the quicker the pulse.

Dr. Larrabee: I simply want to refer to one point in my former talk. I hope you do not understand that I prescribe digitalis as treatment in hemorrhage of typhoid fever, I meant that there was more cause for giving digitalis than ergot, and say this in order to bring ergot into still more disrepute.

I fear that the well-known action of ergot in controlling uterine hemorrhage by mechanical constriction of the blood-vessels through the walls of the uterus has led many physicians to prescribe it where this factor was wanting.

Dr. Kelly: What do you think would be the effect of throwing a large volume of water up the colon from the rectum, and allowing it to pass out immediately after?

Dr. Larrabee: I think it would have a marked effect upon the temperature.

Dr. Kelly: Suppose the temperature was quickly lowered, would it not as quickly go up again?

Dr. Larrabee: Yes, I think it would.

Dr. Kelly: Do you not think that the wash-
If Dr. Irwin had been attentive to the reading of the paper, he would have understood that opium was the first thing used, and used until it ceased to give promise of relief. The patient was actually getting morphine for profuse diarrhea at the time the hemorrhage began.

Concerning the use of gallic acid and turpentine, as before stated, they are approved by the highest authorities, and could certainly have not increased the bleeding. As to the flushing of the colon, this was justified by the fact that hemorrhage immediately ceased upon its use.

T. S. BULLOCK, M. D.,
Secretary.

NEW YORK ACADEMY OF MEDICINE.

Section on Pediatrics.—Stated Meeting, March 10, 1892.

A case of cyanosis was presented by D. A. Jacobi, the patient being fifteen months old. A systolic murmur was heard over the front of the chest, and was conveyed along the abdominal aorta, but was not heard behind. Percussion detected marked cardiac enlargement toward the right. This indicated hypertrophy of the right ventricle, probably the result of obstruction in the pulmonary circulation. The probable diagnosis was partial stenosis of the pulmonary artery, with open ductus arteriosus. With complete contraction of the artery and open septum the heart would not be as large.

Two cases of imperforate anus were reported by Dr. H. W. Berg, the rectal opening in each case being in the vagina. Operation was performed by making a long incision across the perineum, dissecting out the rectum, bringing it down to the natural position and stitching it in place. Both operations were successful, the patients having normal rectums with sphincters, which they would not have had if an opening had simply been made through the tissues.

A case of embolismal apoplexy in a boy of twelve years was reported by Dr. J. Lewis Smith. The boy had had rheumatism, but there was no cardiac murmur. The disease is rare at this age.

Dr. Henry Koplik read a paper on Empyema in Childhood, is it ever Primary? its Relations to Pneumonia and to Pleurisy with Serous Effusion. The etiology of pleurisies, both serous and sero-purulent, has been cleared up in many respects during the last decade, chiefly through bacterioscopic science. We know that children may develop an effusion in the chest, not as the result of constitutional causes alone, but causes to which we also trace the development of pneumonia.

The diagnosis of pleurisy as serous or purulent, from simple inspection of the fluid without the microscope, is highly unsatisfactory, and may lead to grave error in diagnosis and treatment. Children are prone to develop sudden effusions in the pleural cavity, and we are struck with the overwhelming frequency with which such effusion is purulent. It often happens that a clear, serous-looking effusion changes to a purulent one. This, however, is apparent rather than real. It was formerly thought that if fluid at the first exploratory puncture was clear, and subsequently became purulent, some secondary infection had taken place. This we now know to be erroneous. All exudations apparently serous at first, which subsequently become purulent, do so from causes independent of external interference, but inherent in themselves. Such a serous exudation, if examined microscopically, will be found to contain not only leucocytes and blood cells, but pus-producing micro-organisms. In children acute exudations without these micro-organisms is the exception. Such fluid is but one step removed from actual pus. Moreover, the custom of refraining from informing ourselves as to the character of fluid in the chest by puncture, for fear of contaminating that fluid, is untenable.

Another point of importance is the question as to whether in children empyema may be primary; that is, whether it may occur without any connection with external infection or processes in the lung. While cases have been reported in which no other diseased condition was detected upon autopsy, they are extreme rarities, so much so that the writer in a large experience has never seen one.

Can the effusion be purulent from the outset? Undoubtedly it may be, and frequently is so. The connection between pleurisy and disease of the lung is thus seen to be very close. It often happens that the illness begins with
high temperature and all the symptoms of pneumonia, but after a few days the condition changes. Fluid is detected in the pleura, giving the impression that an error in diagnosis has been made. In such cases microscopical examination shows the same germ in the pus from the pleural cavity as is found in the lung, the pneumococcus of Frankel. The tendency of this germ to cause suppuration is well known, and it is found in other complications of pneumonia marked by pus, as meningitis. Its presence in empyema renders the close relationship of that disease to pneumonia very certain. They probably invade the pleura through the subpleural lymph spaces.

There are other exudations which still cause discussion in which we do not find the pneumococcus, but other germs of less marked selective tendencies, as the streptococcus and staphylococcus. There is reason to believe that these are also metapneumonic, though the specific germ does not appear.

There are other cases complicating the secondary pneumonia, and occurring without pneumonia in the infectious diseases. These effusions usually show the presence of the streptococcus.

The Diagnoses of Empyema was the subject of a paper by Dr. J. W. Brannan. As symptoms are obscure, the diagnosis must rest chiefly on physical signs. It is easy when the classical signs are present, immobility of the affected side, loss of vocal fremitus, flatness on percussion, and diminished respiratory sounds. In young children, however, these signs are rarely distinct. There may be no distension of the side whatever, and vocal fremitus, even if it can be obtained, is of no significance. Signs obtained by auscultation are often difficult to interpret. The normal respiratory sounds are so loud and the pleural cavity so small that a considerable collection of fluid may cause but little change. Displacement of the apex beat is a sign of the greatest value. It is caused by no other condition. The two most constant signs are percussion dullness and displaced apex beat. Exploratory puncture affords the most positive, and in many cases the only certain evidence of fluid. As to the character of the fluid, symptoms and signs are very uncertain guides. The needle is the only sure test. Pleurisy following pneumonia or complicating infectious diseases and traumatic pleurisy is apt to be purulent. Though the needle often fails to obtain fluid when present, its use when the fluid does not quickly disappear should never be omitted.

It has been alleged by Baccelli that whispered voice is always present when the effusion is purely serous, but absent when sero-purulent or purulent. This is explained on the ground that sound is more readily transmitted by a homogeneous medium like serum. The certainty of this sign is quite doubtful.

Operation for empyema was considered by Dr. J. H. Ripley in a brief paper. Operation should be performed as soon as a diagnosis has been made. Unless the amount of fluid is very great or the symptoms are urgent, a delay of a few days will do no harm. The location of the incision must depend largely upon the local conditions. It may usually be made in the seventh intercostal space below the angle of the scapula. An incision an inch or more in length should be made down to the costal pleura, through which a small opening should be made. Through this a director should be passed, and the incision enlarged with a blunt-pointed bistoury. A drainage-tube of large size should then be passed several inches into the cavity, with a safety-pin attached to the outer end to prevent its slipping out of sight. If there is not sufficient space for the tube between the ribs, a portion should be removed subperiostially. The wound should be dressed with oakum, which should be changed every day.

Expansion of the lungs in cases treated by incisional drainage was discussed by Dr. J. West Roosevelt. The idea that fluid in the chest causes compression of the lung has been completely disproved. The lung tends to retract from the chest wall whenever fluid or air are present in the pleural cavity. It becomes retracted and condensed, but is compressed only when the amount of fluid is very large. Compression can only occur when the elastic recoil of the lung has been destroyed. Expansion of the lung to fill its normal position almost invariably follows early operation performed at the lowest part of the cavity, where drainage can be free. The earlier the opera-
tion, when pus is known to be present, the better. The prognosis is far better with the chest full of air than with the chest full of pus.

Expansion is aided by the action of the other lung, especially when the glottis is closed, as in coughing. The air is forced by the sound lung into the contracted lung during expiration, and expansion will be seen at that time rather than during inspiration. Granulation tissue by contracting also aids in drawing the lung out to the chest wall.

Removal of sufficient rib to facilitate drainage is perfectly proper. Removal of rib for the purpose of causing contraction of the chest wall is almost criminal. It should not contract, and can only do so by interfering with the lung and obliterating space that the lung requires, and if properly managed would undoubtedly occupy.

Dr. Schankau reported a case in which the chest was found full of pus on the third day after a sudden onset.

Dr. Caillé had seen a case of double primary empyema, as proved by autopsy. The lung was perfectly healthy, and there was no lesion of the tonsils or other organs. Primary empyema is, however, extremely rare in children.

Dr. Koplik said that while primary empyema was a possibility it was very rare.

Dr. Holt had never seen a case of primary empyema, nor one in which pure serum without pus cells had been transformed into pus. Pleurisy accompanying pneumonia is usually distinctly purulent.

Dr. Putnam Jacobi had seen a case of primary empyema. The theory of lung compression was antiquated and untenable.

Dr. Ewart, of London, believed that while primary pleurisy might occur, it was very rare.

Dr. Ripley said that in a child dullness was not always present, and but little fluid was required to produce bronchial breathing. Displacement of the apex was a valuable sign, but it was very difficult in some cases to detect the apex beat.

Dr. Andrew H. Smith had often found a line of egophany just above the fluid, and regarded it as a valuable sign. He said that the lung in empyema was contracted, not compressed. He had many years ago proved the transference of impulse from the sound to the affected lung when the glottis was closed.

Dr. Holt referred to the absence of râles and friction sounds where they had previously been heard as a very valuable sign of fluid.

Dr. Ewart also referred to silence where there had before been crepitations as an important sign. He did not believe that Baccelli’s sign was to be relied upon. Symptoms were sometimes of considerable importance. A high or oscillating temperature, associated with a persistent dry cough for a long time, was a suspicious symptom.

The Chairman asked if it had been the experience of those present that aspiration was advantageous.

Dr. Roosevelt replied that aspiration with the idea of expanding the lung by suction was foolish. At the best it is a waste of time.

Dr. Dawbarn reported a case in which irrigation of the cavity with a warm one-per-cent solution of carbolic acid had been followed by death from shock in four hours.

Dr. Caillé objected to irrigation on the ground that it breaks up the adhesions which we wish to avoid.

Dr. Berg advocated exsection of a rib to aid drainage.

Dr. Winters believed that most undiagnosed cases died from exhaustion or tuberculosi,s, but encysted cases often recovered. He had never seen a case of pure serum changed to pus. Serous effusions were not uncommon in connection with the infectious diseases. He had frequently seen cases of empyema in which a diagnosis of pneumonia had been made at the outset. He had formerly thought that an error in diagnosis had been made, but now believes that that was the usual way in which empyema developed.

W. P. Northrup, M. D.,
Chairman.

Among the many valuable exchanges coming to this office none is more valuable than Merck’s Bulletin to the Working Doctor. It gives a full list with description, dosage, etc., of all the new drugs of the Materia Medica. No physician should be without this valuable accessory to his knowledge of drugs. The subscription price is $2 a year.
**Reviews and Bibliography.**

**Treatise on Gynecology, Medical and Surgical.**

A careful reading of the first volume of this elaborate work leaves the reader not greatly adverse to the conclusion that the American editor's claim, that it is undoubtedly the best work on gynecology which has appeared for many years in any language, is not extravagant.

The material of the Lourcine-Pascal Hospital at Paris was the source from which Bersinutz and Goupil drew their wealth of illustration, and its facilities enabled them to take place in the very front rank of authorities. From that same storehouse, so much improved by the contributions of these famous authors, Pozzi has drawn with a hand as lavish as its resources have been abundant.

The author, in his preface, proudly points to the pre-eminence of the French in the initiation of surgical improvements. He thinks his people are not proud enough of their long scientific lineage, but for all he shows throughout a disposition to be entirely fair, and quotes liberally from the authors of every country.

Passing over successive chapters, we find the first controversial position taken in the consideration of metritis. He declares the various ordinary classifications, such as are based upon the course of the disease, as being acute or chronic, or on the location and described as cervical and corporeal endometritis, parenchymatous and idiometritis, or such as are based on the cause or pathology, and the like, as all misleading, and as artificial as Linnaeus' classification of plants.

Instead of these various bases of classification, he takes simply the clinical symptom that may be deduced from its course or may stand in marked predominance in the order of symptoms. This gives the acute inflammatory, hemorragic, catarrhal, and chronic painful as classifying divisions.

As to pathogeny, he regards it as directly demonstrated that all inflammations of the uterus are due to microbes, and therefore that all are of infectious origin. This infection may be either from without or within, though he regards exogenous infection as vastly preponderating.

In so far as concerns puerperal metritis, he believes that where there is no retention of fetal débris, no accumulation of clots from atony of the uterus, and with no premature rupture of the membranes preventing physiological cleansing of the genital canal, there is no chance whatever of infection. This of course assumes that the attendant will not with his hands introduce the infective germs.

He therefore counsels abstention from useless interference or manipulation in simple cases, and from meddling with antiseptic injections, which may be useless and therefore dangerous. In cases of abnormal and difficult labors, however, and where placental detritus remains in the uterus, he would urge vigorous antiseptic treatment.

He denies to cervical laceration the prominent part in the production of metritis ascribed to it by Emmet. The curette, with injections of iodine, glycerine, and perchloride of iron, constitute the leading features of the author's treatment.

In the very important matter of the treatment of fibromata by electricity, he favors in a rather moderate way treatment by electricity, declaring it a resource which should not be neglected where operation can not promise a radical cure.

But the space allowed to a review does not permit the pointing out of a tithe of the interesting features of this superb work. It only remains to say that every gynecologist will read it; and if the second volume is equal to the first, it is not extravagant to say that the author who writes a better book will have written the best work in any language on gynecology.

D. T. S.
A Dictionary of Treatment; or Therapeutic Index, including Medical and Surgical Therapeutics. By William Whitla, M. D., Professor of Materia Medica and Therapeutics, etc., in the Queen's College, Belfast. Revised and adapted to the Pharmacopoeia of the United States. 921 pp. Philadelphia: Lea Brothers & Co. 1892.

Dr. Whitla is the well-known author of a work on Pharmacy, Materia Medica, and Therapeutics, of which many editions have been issued. Commencing with a Therapeutic Index as usually appended to such works, this eventu ally grew so large as to be cumbersome, and still not large enough to prove satisfactory to the author. He concluded, therefore, to make a separate volume of the part relating to therapeutics, and this is the outcome.

It marks a distinct advance on all other works of the kind we have seen, mainly in being more full, and in giving an expression of opinion of the value of each drug and therapeutic measure. Surgical questions are for the most part treated of very briefly, nothing being said, of course, of methods of operation.

We know of no field wherein, by the use of knowledge already possessed by the profession more marked progress might be made than in this. It ought to be a kind of philosophy of therapeutics. It should tell us the dose of each remedy, the total daily, weekly, or time dosage, the conditions for which it should be given, when it is needed to combine different medicaments, and the mutual modifications produced by these combinations. There is room enough in the wilderness of therapeutics for an empire to be carved. It is a high compliment to this work to say that it has blazed the way a little for an advance in that direction.

There are respects, however, in which the author falls short of the apparent tendency of the age. He does not follow Lauder Brunton, Sidney Ringer, and others, in the way of small doses, though, as we think, usually intelligent in the choice of remedies, he favors full doses as a rule. Thus, in speaking of the use of digitalis in pneumonia, which he says has invariably proved a failure in his hands, and which he has resolved never to depend on again, he gives a prescription in deference to the views of one Petresco, which, he says, may be tried in certain cases:

Spt. ammon. aromat. \( \frac{3}{2} \) ss;
Spt. ether. \( \frac{3}{2} \) v;
Tinet. digitalis. \( \frac{7}{2} \) i;
Moschi. \( \frac{7}{2} \) gr. ix;
Vin. Ipecac. \( \frac{7}{2} \) i;
Tinet. cinchon. \( \frac{7}{2} \) i. M.

Sig: One tablespoonful to be taken every four hours in a wineglassful of water.

This in deference to said Petresco, who gives from sixty to one hundred and sixty grains of the leaf daily in pneumonia, "with eminently satisfactory results, the attack usually abating by the second or third day, sometimes the patient being able to return to work in twenty-four hours." The author would have left with us a better impression if he had kept out his prescription and told us in a foot-note that said Petresco was either a lineal descendant of Baron Munchausen, or a lunatic, or both.

D. T. S.


If the fact of a work's having attained many editions ordinarily excuses the reviewer from doing little more than making the announcement that a new edition has appeared, it might be reasonably contended that the appearance of an elaborate work on operative surgery by Frederick Treves carries with it the assurance of a work of the first order, and in like manner lightens the task of the reviewer. A careful perusal of the work justifies the assumption.

The work is also a departure. It concerns itself solely to the practical aspects of treatment by operation, the technical details of operative surgery, and with such part of the surgeon's work as comes within the limits of a handicraft. It does not deal with the indications for operating, and ventures scarcely at all into the field of surgical statistics.
The author has wisely relied upon his own personal experience in the operating theater and upon repeated operations on the dead. In connection with each important class of operations are described the details of the preparation of the patient and the after-treatment of the case; and when several methods of performing an operation are described, a discussion is given of their comparative merits.

The reader of this work soon comes to realize that he is following a thinker and a master. One feels that the author is offering no compilation, but that every measure, if not originally his own, has been made his own by intelligent experience.

The illustrations are plain, the type large and clear, while the vigorous and lucid style never allows interest to flag.

Space is too limited for extended notice of separate details, and it only remains to say, what need hardly be said, that the work will take at once the front rank as an authority in operative surgery.

The Chinese, their Present and Future—Medical, Political, and Social. By Robert Colman, Jr., M.D., Surgeon in Charge of the Presbyterian Hospital and Dispensary at Yeng Chow Fu, etc. Illustrated with fifteen fine photo-engravings. Royal octavo, 212 pp. Philadelphia and London: F. A. Davis. 1891.

This elegantly prepared volume gives us a homelike and very intimate acquaintance with Chinese life and Chinese character from the standpoint of the missionary physician. It is a realistic transcript of individual experience that makes us feel as if we ourselves were the actors.

Dr. Colman has not formed so high an opinion of the abilities of the higher classes of the Chinese as many who have made them a study, and one can fancy that now and then he detects a bias due to the way in which the educated classes have received him in the character of a missionary.

He gives an interesting though cursory view of the diseases most prevalent in China, and the respects in which they behave differently there from what is observed among Caucasian races. Of Chinese therapeutics he has nothing to say in commendation, and in that is in agreement with all other writers.

He evidently regards the habit of smoking opium so widely prevalent as carrying with it a greater train of evils than has been observed by many who have become familiar with the inner life of the Chinese, and particularly is his picture of family life a dark one, especially in those families where polygamy prevails. When he tells us that in nearly every polygamous family there has been a suicide or an attempt at suicide on account of jealousy among the wives, we can not but apprehend that he observes with the eyes of the missionary.

Of the missionaries, now an object of such hatred in China, he speaks in the highest terms, but does not differ from the majority of reporters as to the slow progress of evangelizing efforts. Nor does it seem likely that the Chinese, proud and self-satisfied, will put up with fewer concessions than did the Pagans of Europe, who after all were largely converted by the sword, and who required that their religion should be blended with the Christian—that their feast days and many ceremonies should be adopted by the new religion—and that the highest religious office of pagan Rome should be perpetuated as the highest office in the Christian Church. An equal concession to the Chinese might help along materially, especially now that it is no longer good form to push propagandism with the sword. But, aside from all this, whoever would take a pleasant trip to China, and gain a good acquaintance with her institutions without the usual cost and annoyance, can accomplish his object fairly well by reading this book.

Chloralamid in Epilepsy.—At the October meeting of the New York Academy of Medicine, Dr. Charles L. Dana, Professor of Diseases of the Mind and Nervous System, New York Post-Graduate Medical School, in speaking of the symptomatic treatment of epilepsy, refers to chloralamid as follows: "The most valuable adjuvant was hydrate of chloral, but I have found a new drug in chloralamid, which does all the good ascribed to the former drug without affecting the heart or circulation."
Correspondence.

LONDON LETTER.
[from our special correspondent.]

The Royal Commission on Vaccination; A Memorial to Sir Morell Mackenzie; Eczema and Hatbands; Wounding by a Wernat Rifle; Mr. Justice Denman; Conical Cornea; Death by Fall; Subperitoneal Hysterectomy; Snake Bite; Mr. F. Treves' New Work; The Leprosy Report.

The Royal Commission appointed to inquire into the working of the Vaccination Act have decided to present an interim report recommending an important modification in that part of the act which deals with the question of penalties. It is said that the majority of the commissioners are believed to be of opinion that the practice of imposing cumulative penalties should be abandoned, on the ground that such penalties are mischievous in their effect and are not an effectual deterrent. The commissioners are also said to entertain the view that anti-vaccinationists ought not to be treated in the same fashion as criminals. It is understood that Lord Herschell, the chairman, is drafting a report embodying these points, and that at the next meeting of the commission the document will be submitted for final approval. Inasmuch as the decision of the commission to prepare an interim report was partly the result of a communication from the Local Government Board, pointing out the desirability of an early pronouncement respecting cumulative penalties, it is anticipated that legislation upon the subject will be attempted before the close of the present Parliament.

Lord Calthorpe writes to inform the many friends of the late Sir Morell Mackenzie that it has been decided to establish a memorial fund, the proceeds of which shall be devoted to some permanent addition to the Throat Hospital, an institution founded by Sir Morell, and to which, for a period of twenty-seven years, he devoted the greater part of his time, the best of his energies, and the whole of his heart.

Dr. James Startin, of Harley Street, proclaims the warning that eczema on men's foreheads is often caused by their wearing hats the linings of which have been whitened and glazed with arsenic and other irritating substances. He recommends that the lining should be of silk or some soft undyed material.

The first recorded case of wounding by the new Austrian magazine rifle is reported. An artilleryman committed suicide in the arsenal at Vienna by shooting himself with a Wernat carbine. The bullet entered his breast and killed him, then passed through the head of a second soldier who was standing near and stretched him a corpse on the spot, and finally pierced the arm of a third. The bullet splintered the bone of the arm and the wound is of a serious character.

Mr. Justice Denman the other day mentioned the mistake of a witness who used a word of which he did not know the meaning. He wished to say that a doctor who attended him was only a "locum tenens," but persisted in calling him a "local demon." Even when the proper phrase had been put to him three or four times he stuck to his own version as the real one and left the witness-box fully persuaded that a medical practitioner who officiates for another is a "local demon."

Mr. Tweedy, at a recent meeting, speaking of conical cornea, said that he considered an inherent weakness of the corneal structure was the hypothesis most in conformity with observed fact, and this inherent weakness he thought was best explained by imperfect completion of the developmental processes. In early fetal life the gap in the embryonic cornea, caused by the involution which gave origin to the lens, was filled up by cells, beneath which was a homogenous layer. An intrusion of mesoblastic tissue took place into this layer, and centripetally extending gradually closed over the central part, which was, however, the last part to be formed. This mesoblastic tissue was the fctal cornea and the physical factor of conical cornea consisted in imperfect growth of the central portion of this layer. This was the only explanation he thought, which would account for the conical shape assumed by the cornea when thus diseased.

A good deal of attention has been drawn to the ideas of Prof. Heim, of Berlin, concerning
“death by fall.” He has based his observations on personal experience, and on a large number of cases which have occurred not only in the mountains, but also in war, in industrial establishments, and in railway accidents. In all cases the feelings were the same, or rather they differed only in degree. These feelings are by no means such as those who have the misfortune to witness such accidents imagine. The victim, according to the professor, suffers no pain, no paralyzing terror. He is perfectly aware of what is going on. The time seems long to him. In a few seconds he is able to think so much that he can report for an entire hour on it. His thinking power is immensely increased. In almost all cases the past seems suddenly lighted up as if by a flash of lightning. All phases of life pass before the mind’s eye. Nothing petty or unimportant disturbing the retrospect. Then gentle, soft tones sound in one’s ears and die away at last when unconsciousness sets in. One bears the fall of the body, but does not feel it. It will be remembered that Mr. Whympor, who had a severe succession of falls once in the Alps without losing his consciousness, declares emphatically that as he bounded from one rock to another he felt absolutely no pain. The same thing happens on the battle-field, the entrance of the bullet into the body is not felt, and it is not till he feels the blood flowing or a limb paralyzed that the soldier knows that he is wounded. Persons who have had several limbs broken by a fall do not know which limbs are affected till they try to rise.

Dr. Heywood Smith thinks that the main points in the operation of subperitoneal hysterectomy are to secure every bleeding vessel if possible separately. To lace the whole pelvic peritoneal wound with an uninterrupted suture of chromized catgut, taking care that Lembert’s stitches are used over the uterine stump so that it is entirely sealed with peritoneal covering. He thinks it best to leave the cervical canal pervious, so that if suppuration occurs drainage can take place. Dr. Smith is also convinced that the subperitoneal treatment of the stump will eventually supersede to the extra-peritoneal treatment with the clamp.

Sir Joseph Fayrer considers that experience shows that no physiological antidote to snake poison is known, and that given the full effect remedies are of little avail. In India the average loss of life during the eight years ending 1887 was 19,880 human beings yearly, and until some measures were taken to make known the appearance and habits of the poisonous snakes there would be no material diminution in the loss of human life from snake bite. Sir Joseph suggests that a reward should be given for each poisonous snake destroyed.

Dr. Arthur Whitelegge is about to give a course of three lectures at the Royal Institution on Epidemic Waves. The first lecture is on Cyclic Waves, the second on Superadded Waves, and the third on Pandemic Waves.

Dr. Treves, in his Manual of Operative Surgery, which has just come from the press, says that slight cases of joint erosion are best treated by the removal of the diseased synovial membrane, coupled with the gouging out of the carious bone, but if ankylosis is aimed at it is best affected, and the resulting ankylosis is more certain and permanent if the articular cartilage is removed, as it easily can be in such cases without prolonging the operation more than a few minutes or adding to any sensible extent to its danger.

The report of the Leprosy Commissioners is said to be of a reassuring character as to the increase of the disease, and does not involve any sweeping proposals as to the isolation or innovation in treatment. It will be published simultaneously in London and Calcutta during the month of June next.

March, 1892.

Tonguino1, the new artificial musk, occurs as a snow-white crystalline powder with which needle-shaped crystals are interspersed. The odor appears to be due to the presence of a nitro-terpene and nitro-sulpho-xylol. It is soluble in alcohol, water, fats, oils, ether, and chloroform. The alcoholic solution (1 in 50), upon considerable dilution with water, is very agreeable in odor, and the perfume is not precipitated. At present tonguinol is sold by the manufacturers at the rate of one and one half pence per grain.
Abstracts and Selections.

RESEARCHES ON THE BLOOD IN DISEASE.—Thanks to the more exact methods of estimating the number of corpuscles in the blood and their richness in hemoglobin, we are becoming possessed of a large amount of information respecting the variations presented by these elements in physiological and pathological conditions. The most recent contribution to the subject is by Dr. Carl Sadler, whose researches were pursued in the clinic of Prof. von Jaksh at Prague, and the details of which form a supplement to the Fortschrifte der Medicin (Vol. x, No. 4). The monograph contains the results of very numerous observations (made with the Thoma-Zeiss hemacytometer and the hemometer of von Fleischl) in cases of diseases of the blood, pneumonia, pleurisy, pericarditis, peritonitis, acute rheumatism, meningitis, scarlet fever, malaria, typhoid fever, peri-typhilitis, Well's disease, puerperal "sepsis," tuberculosis, bronchitis, nephritis, morbus cordis, gastric catarrh and dilatation, carcinoma (of stomach mainly), sarcoma, lymphadenitis, syphilis, cerebral tumor, cirrhosis of liver, and cholera nostras—a lengthy list, covering a wide range of disease. The results are drawn up on a methodical plan, and are well worthy of study in each individual instance; but it must suffice here to cite the chief facts contained in the summary that closes the monograph.

In acute diseases Dr. Sadler finds that there is constantly a decrease of red blood-corpuscles, but mostly not very marked. In chronic diseases the diminution is greater, especially in such as exhibit cachexia, and there is a proportionate diminution in the amount of hemoglobin. An exception to this is met with in tuberculosis so long as nutrition is fairly well preserved. Nor does valvular disease of the heart, particularly mitral disease, affect the number of corpuscles. In chlorosis the corpuscles may long remain at the normal standard, while the hemoglobin markedly falls, a confirmation of a well-established fact. In other cases of anemia, the essential form and those due to losses of blood, atrophy of stomach, and other causes, the decline in corpuscular richness takes place pari passu with that of the hemoglobin.

Acute and profuse diarrhea produces a notable increase in the proportion of corpuscles and hemoglobin, attributable to inspissation of the blood, and this may account for the apparent maintenance of a fairly normal standard in some cases of typhoid fever.

Dr. Sadler found a diminution in the number of white blood-corpuscles in malaria, apart from the administration of quinine. Leucocytosis is proved to occur during digestion, and also during the puerperal period and the first days of lactation. Pathological leucocytosis is found in all diseases accompanied by exudation, such as pneumonia and serous inflammation, including acute rheumatism, but not invariably.

An explanation of the variation may perhaps be found in the different kinds of exudation that occur, while the leucocytosis itself has been explained by the absorption of "nuclein" set free from the disintegration of the exudate. Leucocytosis does not occur in uncomplicated typhoid fever, or in tuberculosis, except during the reaction produced by injections of tuberculin. It was present in only one half of the cases of carcinoma examined, and had relation rather to the supervision of ulceration than to infection of lymphatic glands. Singularly, in contrast to carcinoma, leucocytosis is invariably present in cases of sarcoma, the reason for which is not at present obvious.

Dr. Sadler did not find any increase of white corpuscles in cases of tubercular lymphadenitis which had not proceeded to suppuration.—London Lancet.

THE QUESTION OF NERVE FATIGUE.—Some years ago it was shown, but rather inconclusively, by Bernstein, that tetanic stimulation of a motor nerve in frogs caused no fatigue, since the muscles would still twitch when the current which had been interposed to block the stimulation was removed. An improved demonstration of this fact was made several years later by Wedenski. It was then shown by Bowditch that the use of curare made it possible to demonstrate that the behavior of the nerves in warm-blooded animals (cats) is the same. The motor nerves do not fag. The same author afterward published a still more complete demonstration by experiments upon dogs. A motor nerve may be tetanized for hours, and yet as the curare used to check movement and fatigue of the muscles loses its effect, that is, is eliminated, the muscle fibers are again led to contract, the stimulation still passing down the nerve apparently in undiminished vigor.

It is, of course, important to inquire whether a similar immunity to fatigue exists in other nerves. For the sensory nerves (Langendorff) it is rendered very probable by the persistence of pain, as in toothache, which may be as great upon waking as when we went to sleep, but a different form of demonstration is very desirable. Szana has made some experiments which show that the inhibitory fibers of the vagus (at least in the rabbit) are not fatigued by long-
continued stimulation. By using atropine the inhibition of the heart-beat could be prevented, although the vagus was tetanized for hours; but as the atropin effect wore off (elimination), the inhibitory action of the nerve became apparent and gradually regained its full power. *Boston Medical and Surgical Journal.*

**Influenza and its Treatment.**—There is, however, one remedy which, from its simplicity and from the very confident opinion expressed by its introducer, may be singled out, in order, if possible, to get some more general opinion as to its merits. We refer to the use of large and repeated doses (thirty grains every two or three hours) of potassium bicarbonate, which Mr. Crrar, of Maryport, introduced to the notice of his fellow practitioners in an address he delivered as president of the Border Counties Branch of the British Medical Association. We need not concern ourselves with the somewhat strained analogies and arguments adduced by Mr. Crerrar in that paper, or dwell on the fact that it is not possible from his address to perceive why he should have come to the conclusion that the influenza poison could be neutralized by increasing the alkalinity of the blood. We may fail to be convinced of his logic, and yet not refuse to accept his facts; and the evident sincerity of his statements, which, in a paper he has just forwarded to us, are supported by the experience of others, and particularly by the personal testimony of a well-known teacher in Edinburgh University, together with the results of the treatment in the wards of the Edinburgh Infirmary, seem to warrant some attention being paid to them. It is not necessary to give the text of this paper, which mainly consists in the citation of such testimony, but in justice to its author we may quote his conclusions as to the advantages of the method.

They are: "(1) If used before the attack it prevents the disease. (2) It destroys the power of the disease within twenty-four hours, generally within four or six hours. (3) The strength is conserved, and the convalescence is short and satisfactory. (4) Sequelae are conspicuous by their absence. (5) The death-rate is reduced to a minimum. I have not had any death in more than one thousand cases. (6) It has more power over influenza than I have ever seen exerted by any method of treatment over any other disease, and I have had an extensive practice for upward of a quarter of a century. (7) If adopted by the whole profession it would make influenza non-existent in one week. (8) It rests upon a sound scientific foundation."

The last two conclusions may be open to question, but the preceding are statements which no medical practitioner of standing would venture to put forward without good cause. Therefore, without in any way desiring to bias opinion, we have, after due consideration, deemed it only right to call attention to these statements in order that they may be put to the test. No doubt one's first impulse is toward incredulity, but prima facie it can hardly be asserted that the method is unreasonable, although the administration of such large doses of a salt that has undoubtedly a depressing action on the circulation is surely a step to be taken with circumspection and care, especially in a disease so characterized by depression as influenza.—*London Lancet.*

**Experiments with the Pneumococcus.**—At the present time, when pneumonia is exceptionally prevalent, it may be well to recall the investigations conducted last year by Drs. G. and F. Klempeter, and published in the *Berliner Klin. Wochenschrift* in August last. They then detailed experiments, the practical outcome of which may possibly be of real therapeutic importance. It is known that in most cases pneumonia, after having during from five to seven days caused grave general symptoms, terminates abruptly by crisis. At this period there has been little or no change in the state of the lungs, which still remain infiltrated with fibrinous exudation, or in the properties of the pneumococci, which are found in great numbers in the sputa and retain all their virulence. On what, then, does the pneumonic crisis depend? Only one explanation seems possible: the crisis is due to the products of the organisms, which by their accumulation modify the soil on which the microbes develop. In their experiments made on rabbits, the investigators observed that any nutritive substance which had served as a culture medium for the pneumococci, even if it had been separated from the microbes by filtration, conferred on the animal immunity against the pneumonic infection. They next proved experimentally that the blood serum of a rabbit "vaccinated" against the pneumococcus may cure an animal infected with pneumonia. An intravenous injection of eight cubic centimeters of serum of an animal rendered refractory, practiced twenty-four hours after the infection, produces a gradual fall in the febrile temperature, and hastens the recovery of the animal. In another series of researches, devoted to the study of the cause of the remedial action of the serum of inoculated animals, the same observers found that the pneumococcus, when introduced into the body of an animal, gives rise to the production of a "pneumotoxine," which may be isolated. This pneumotoxine produces a febrile reaction of several days' duration, after which they have noted in
the fluids of the animal another substance, "anti-pneumotoxine," which has the power of neutralizing pneumotoxine. The blood serum of an animal on which immunity has been conferred contains anti-pneumotoxine, and it is this which seems to forward the recovery from the pneumonic infection. In the blood serum of patients affected with croupous pneumonia they have also found pneumotoxine and anti-pneumotoxine, the former chiefly during the febrile period of the disease, the latter after the crisis. They also claim to have treated successfully rabbits suffering from pneumonia by injecting into these animals blood serum taken from a pneumonic patient after the crisis. Being assured by experiments made on themselves that man may support with impunity and without any local and general reaction injections of the serum of animals rendered refractory to Frankel's pneumococcus, the investigators treated six patients affected with pneumonia. Although the number treated was small, the result has been very encouraging. In fact, in all these patients a hypodermic injection of from four to six cubic centimeters of serum was followed at the end of from six to twelve hours by a considerable fall in the temperature, with slowing of the pulse and respiration. These observations are especially noteworthy as confirming those made by Emmerich and Fowitzky, who claim that they have conferred immunity on the rabbit by means of hypodermic injections of attenuated cultures of the pneumococcus; but this immunity, they say, is incomplete. On rabbits infected by pneumococci, on the other hand, full immunity is obtained by intravenous injections of a culture having its entire virulence, but largely diluted. The liquid obtained by crushing the organs of an animal thus rendered refractory exercises on the pneumonic infection a sure remedial action when it is injected under the skin or into the abdominal cavity, and especially when it is thrown into the veins of the infected animal. 

Ibid.

Identity Reaction of Phenacetin.—W. Autenrieth and O. Hinsberg have recently published a paper on phenacetin and certain of its derivatives in the Archiv de Pharmacie, volume cxxix, page 456, in which they first communicate a new identity reaction of the substance, and afterward give the results of their investigations into the nature of the product of this reaction and into its constitution.

Identity Reaction for Phenacetin. Upon one part of finely powdered phenacetin pour two parts of nitric acid containing ten to twelve per cent of HNO₃ (specific gravity about 1.075), and heat for a short time to boiling. The liquid will assume a yellow to orange color, and the phenacetin, which had at first remained colorless, will at the same time (so far as it is not dissolved) be converted into a nitro-compound of an intensely yellow color. When the liquid cools, a further crop of needles of the yellow (or brownish-red) compound crystallizes out.

Antifebrin and antipyrin remain unaffected when treated in this manner.

If concentrated nitric acid is used, however, antifebrin is colored yellowish-red and antipyrin yields a red solution.

The meeting-point of the characteristic yellow derivative of phenacetin, which was subsequently recognized as mononitrophenacetin, or C₆H₆.OC.H.(4).NO₃.(3).NHCOCH.(1), is at about 103° C.

Effects of Sulphonal.—In the Journal of Mental Science for the current month Dr. Carlyle Johnstone records his observations on the effects of sulphonal on fifty patients suffering from various kinds of mental disorder, including general paralysis, melancholia, and mania. His experience with the drug points to the conclusion that in properly regulated doses it is an efficient hypnotic, and, compared with other hypnotics, its action is fairly certain and constant. The sleep produced by it is natural and undisturbed by dreams; it has no injurious effect on the appetite, circulation, respiration, or temperature, and the general health does not suffer under its use. After a time the dose may be reduced, or it may even be discontinued, and the patient still continue to sleep well. Dr. Johnstone also found that it had a distinct sedative action in mental excitement and distress, and could be employed with great benefit in cases of insanity, especially such as are of recent or acute character. Its complete tastelessness also is a recommendation in such cases, allowing its combination with food or in milk in such a way as to escape the notice of the patient. The chief drawbacks were found to be its slowness of action, and often the persistence of its soporific effect during the succeeding day, with at times confusion, giddiness, and fatigue. After repeated doses a dreamy confusion was noticeable, and subsequently slight weariness and fatigue, followed in a few cases by enebelishment and shakiness of locomotion; but nothing occurred which could be called an alarming symptom. As a rule, indeed, the mental condition improved, the excitement, irritability, and motor restlessness being diminished and the wretchedness dispelled. It will be seen that the writer's conclusions are in accord with most of those already published, and that, while regarding sulphonal as by no means a perfect hypnotic, he is inclined to give it a very impor-
The American Practitioner and News.

245
tant place in the treatment of sleeplessness and restlessness generally. The best doses he found to be between thirty and forty grains, and it should be given just before the patient lies down. The freedom of the drug from taste and smell, as has been said, is one of its advantages, and renders its administration easy.—London Lancet.

ACROMEGALY.—M. Gabriel Gauthier records the details of the post-mortem examination of a case of acromegaly in the current number of Le Progrès Medical, the clinical facts of the case having been published in the same journal two years ago. The patient died, "like most acromegalics," from marasmus and syncope, and during the last month of his life he had some attacks of pseudo-erysipelas on the forehead, nose, and cheeks. The post-mortem examination showed thickening of the cranium at the occipital protubercence, but not elsewhere. The vessels of the pia mater were voluminous and engorged, and in removing the brain from the cranial cavity it was found that the pituitary body was replaced by a tumor the size of two thumbs, filling the sella turcica and overlapping it. The tumor was nearly spherical, and was inclosed in a special envelope of dura mater, tense and thinned. On incising this some pulpy material escaped, the whole mass weighing thirteen grams. Microscopically, no other element than that of cerebral tissue could be found in it. The optic and ocular nerves in contact with the tumor were unaltered, the circular and cavernous sinuses were especially compressed, while the coronary sinus was hardly to be seen. The pituitary fossa was considerably enlarged, and clinoid processes partly destroyed, while the shell of bone over the sphenoidal sinuses was very thin. There was no lesion of the brain itself, or of its nerves, or of the sympathetic. The thyroid body was normal. As to the viscera, there was some degeneration of the myocardium, and the valves of the heart were normal, but the orifices large; the kidneys were large and soft; the liver, spleen, and lungs normal. It was impossible to examine the whole skeleton, but the observation of the condition of the fingers noted during life was verified by dissection, the phalangeal joints of the left ring finger showing marked changes, such as wasting of the articular ends of the phalanges and ankylosis of the terminal and middle phalanges. —Ibid.

Etherization in Laryngeal Croup.—Dr. Betz reports the case of a child, aged eighteen months, that presented the typical symptoms of laryngeal croup. The case appeared so hopeless that tracheotomy was, although proposed, rejected. Dr. Betz then proposed "etherization." Three drops of a mixture of ether sulph. 3 parts, acetic ether 1 part, menthol 0.1 part, were ordered to be inhaled every quarter of an hour, just as chloroform is inhaled. It was hoped that the cold from the evaporating mixture would contract the surface blood-vessels of the larynx, and thus reduce the edema present. The child was seen again in two hours, and the condition had somewhat improved; the etherization to be continued, three to four drops every half hour. After six hours the condition was unmistakably better, so much so in fact that the etherization could be dispensed with. A piece of intestine filled with ice was placed around the child's neck. After this progress was so rapid that in twenty-four hours the child was out of danger.—Memorabilia.

The Prophylactic Influence of Tobacco.—Dr. V. Tassinari, of the Institute of Experimental Hygiene attached to the University of Rome, has been attempting to demonstrate the prophylactic advantages of tobacco smoking. He recalls the fact that in the eighteenth century, and even in the seventeenth, a certain number of medical men (Willis, Dimerbrock, and others) advised their friends to smoke in times of epidemic. At Strassburg, in 1842, Ruef called attention to the fact that the workers at the tobacco manufactory were exempt from almost all the prevailing epidemics. Pécholier, in the Revue d'Hygience (1883, p. 323), proclaimed the same opinion, and Dr. Walter Cock, of Texas, was rash enough to recommend in 1889 the use of tobacco as a preservative against phthisis. An American dentist (Dr. Miller, of New York) made experiments in 1884 with the smoke of tobacco on the micro-germs of dental caries, and declared that the results were satisfactory and conclusive. Dr. Vassili, of Naples, employed in 1888 a small balloon, which he lined internally with a layer of gelatine containing cholera bacilli. He found that by drawing through this balloon the smoke of from one to four cigars (the number of cigars required depending on their strength in nicotine) the gelatine was completely sterilized. Dr. Tassinari has now repeated these various experiments, and maintains that the smoke of tobacco either entirely destroys or in any case retards the development of the bacillus of cholera, of anthrax, and of pneumonia. Dr. Tassinari published twenty-one charts indicating the action of tobacco on various known microbes, according to the nature of the tobacco and the amount consumed. The latter varied from one to six grams, smoked in from
ten to thirty minutes. The bacilli of Asiatic cholera and that of Friedländer (pneumonia) were always completely destroyed, no matter what sort of tobacco was used. The bacillus of anthrax resisted better, and that of typhoid was hardly affected by the smoke. As a practical result of these experiments Dr. Tas-sinari insists on the utility of smoking as a means of preventing the decay of teeth. He seems to imagine that women suffer more from dental caries than men, and attributes this difference to the fact that but few women smoke. It must be confessed that these experiments are not conclusive. There is a great difference between the sterilizing of microbes in nutritive gelatine and in the human being. No one doubts the antiseptic qualities of nicotine. Sulphurous acid is also an antiseptic, but it still remains to be proved that London fogs and London smoke save the metropolis from zymotic disease.—*London Lancet.*

**Phagocytosis in Relation to Immunity.**

The discussion which opened at the Pathological Society last Tuesday served to show how difficult and intricate is the question of immunity from specific diseases, and also how various may be the interpretations put upon the results of experimental observation. The physiological fact of phagocytosis is generally allowed, and there does not seem to be any serious difference of opinion as to the existence of an influence on the behavior of leucocytes, to which the term "chemiotaxis" has been applied. But, as Professor Burdon-Sanderson pointed out in the weighty remarks that he made, the wider application of phagocytosis to protection of the organism against the attack of infective virus implies a very great addition to the known powers and properties of the leucocyte. Dr. Sims Woodhead, who naturally went over some of the ground which he has recently dwelt upon in these columns, and who on this occasion was the sole advocate of the doctrines of Metchnikoff, anticipated this objection in his remarks on the necessity for special stimuli to evoke the latent properties of these protoplasmic elements of the body; and although Dr. Klein, who assumed a very militant attitude toward the whole theory, pointed out the selective power of the various specific poisons for special tissues, yet it is open to conjecture that it may be just in these tissues that the phagocytic action takes place in such diseases. Dr. Klein's criticism, founded on conditions in which leucocytes are apparently destroyed by microbes rather than the reverse, was not so weighty as were his interesting observations upon the behavior of anthrax bacilli introduced into the lymph sac of the frog.

Here he came to close quarters with the supporters of phagocytosis, since he was dealing precisely with a class of experiments upon which a large part of their argument rests. Mr. Kantack's contribution to the debate was a thoughtful and thorough consideration of the matter. He advanced many objections to the assumption that phagocytosis by itself is adequate to explain the phenomena of artificially induced immunity. But, as we have said, the subject is one which bristles with difficulties, and it is not possible as yet to harmonize the several observations. We can not expect that the debate will succeed in determining a problem that is engaging the profound attention of the most advanced and thoughtful school of pathologists. It will, however, serve to indicate those parts of the question which most demand investigation, and thus tend to its further elucidation.—Ibid.

**Diphtheria and Group.—Dr. Gilbert, of Geneva, commends (Le Progrès Médicale):**

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<th>Drug</th>
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<td>Potass. chlorat.</td>
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<td>Syrup. polygalae</td>
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<td>Sp. vine gallie</td>
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<td>Aqua</td>
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Dose: A tablespoonful, repeated hourly until perspiration is produced.

**The Treatment of the Status Epilepticus.—The St. Petersburger Med. Wochenschrift publishes an account of a method of treating the so-called "status epilepticus," which has been successfully adopted by Dr. Kernig. He gives the following particulars of a case treated by this method: A girl in the Obuchoff Hospital in St. Petersburg, after suffering a whole night from almost continuous epileptic convulsions, next morning was unconscious, but without any edema of the lungs, and with a fairly good pulse. On the convulsions being renewed, a hypodermic injection of .02 gram of hydrochlorate of pilocarpine was given, and 1.5 grams of camphor in an emulsion. Profuse perspiration followed, and the convulsions immediately ceased, but for an hour pulmonary edema and collapse seemed imminent. These symptoms, however, passed off, and were followed by sound sleep and a good pulse. The patient was made to lie on her side to prevent annoyance from the excessive secretion of saliva.—*London Lancet.*

**The Treatment of Pulmonary Gangrene.**

Dr. O. Hewlke, of Warsaw, in the *Deutsche Medicinische Wochenschrift*, gives particulars of his treatment of pulmonary gangrene, with notes of four cases. In all these the usual rem-
edies, such as turpentine, creosote, inhalations of carbolic acid, etc., had been tried without effect. He then made antiseptic injections into the gangrenous tissue, and during this treatment considerable improvement was observed, amounting in one case to almost complete cure. The syringe used had a capacity of 2.5 cubic centimeters, and was provided with a needle from 5 to 7 centimeters long. Dr. Hewdke first made use of menthol, but as this caused unpleasant symptoms he substituted a one-third to one-half-per-cent alcoholic solution of thymol, which could be well borne to the extent of from 2 to 2.5 cubic centimeters. Local irritation of the skin or subcutaneous tissue was not observed, except where the injections had been frequently repeated. The mechanical part of the treatment presented no difficulties. Immediately the needle reached the cavity a paroxysm of cough occurred, followed by free expectoration, the patient both tasting and smelling the injected fluid. Dr. Hewdke, with other observers, recommends the selection of recent cases and those presenting superficial and non-tuberculous cavities for this method of treatment.—Ibid.

Heart Tonic.—For a continued effect, Dr. William Henry Porter, of the New York Post-Graduate Medical School, advises:

Tr. belladonnae..................f3 ii-ij;  
Tr. opii deod..................f3 ii-iv;  
Tr. nucis vomicae..............f3 [x-y];  
Tr. gentian co..................q. s. ad f3 iiq.

Sig: One fluidram every four hours.

Sulphonal.—In a lecture delivered at the Congress of German Neurologists in Baden, June, 1891, Dr. Gilbert, of Baden Baden, describes four cases which were treated in the sanatorium there. Two of the patients were under treatment for the sulphonal habit, as it had become a perfect mania, so much so that the absence of it caused symptoms similar to those experienced when overcoming the morphia habit. This was not the case with the other two, but serious symptoms were evident. Besides the well-known injurious effects produced by the use of sulphonal, all the four patients were unable to write straightly and distinctly. The characters were unsteady, and in an ascending line from left to right. Attention is called to the fact that although the effects of sulphonal are well known, still it is used as freely as ever. In Germany it can even be obtained at chemists' shops without medical prescription. In conclusion, when the use of this drug seems unavoidable it is recommended that it should be prepared as follows: Boiling water is poured on the dose of sulphonal and the mixture is cooled by constant stirring until it is just palatable. By this means precipitation is nearly avoided, and the drug enters the stomach in a dissolved form. Thus sleep is said to be generally produced in from fifteen to twenty minutes, and the troublesome feeling of weariness, enervation, etc., usually experienced by the patient on the day following the use of sulphone does not appear.—London Lancet.

A Few Observations in regard to the Examination of Human Milk.—(Arch. f. Kinderheilk., Baud xiii, Hft. 1 and 2, 1891.) Monti, after making examinations for over ten years, makes deductions in reference to human milk as follows: (1) Milk having a specific gravity of from 1,030 to 1,035 and containing three to five per cent of fat, and in which only small variations occur, is to be considered good and nutritious for the child. (2) Menstruation produces no effect upon the specific gravity or the amount of fat. (3) Where the specific gravity is high and percentage of fat small the milk is not good. (4) A high percentage of fat may be temporary, as a result of some pathological condition of the woman, for instance, mastitis. (5) When a pathological condition is present, a rapid or gradual diminution in the quantity of milk will be observed.—Monti, American Journal of Obstetrics.

For Fetid Breath.—The following is recommended in the Revue Générale de Clinique et de Thérapeutique for the above (St. Louis Medical and Surgical Journal):

Sacharin.............. )  
Acid, salicylic........... [a]........ gr. xx;  
Natri bicarbonate... )  
Alcoholis.............. 5i;  
Ol. menth. pip............. gtt. x. M.

Sig: A teaspoonful in a wine-glass of warm water, to be used as a gargle once or twice daily.

Monobromide of Camphor for Spermatorrhea.—The Medical Summary says: The monobromide of camphor has been successfully used in the treatment of spermatorrhea, where a host of the usual remedies had been administered with no satisfactory results; finally the monobromide of camphor was given with prompt effect and perfect cures.

Salicylate of Lithia.—Dr. Vulpian states that salicylate of lithia is more efficacious than salicylate of soda in cases of acute and progressive subacute articular rheumatism. It also has some effect in chronic case when a certain number of the joints are still deformed, swollen, and painful.
THE IRREGULARS.

The war against the quacks seems, so far as Louisville is concerned, to be under truce just now, the reason being the adverse decision of one of our Judges, and the usual legal technical hindrances of which the irregulars were of course expected to avail themselves. "Possession being nine points in the law," it is possible that such quacks as have been doing business for years in the city will hang on with a grip that no practicable legislation can break. Be this as it may, there is no reason why we should not bar the door against further intrusion. The following from Secretary McCormack seems to set forth the needed move, and we hope that all reputable physicians of the State will give it their moral, social, and political support:

Editors American Practitioner and News:

AN ORDINANCE TO PREVENT EMPRIRICISM.—

I inclose the draft of an ordinance which has been passed to supplement the State law in Lexington, Paducah, Harrodsburg, Stanford, Elizabethtown, Lebanon, Glasgow, and several other cities in the State, and is now before the council of the other towns of the State likely to be visited by charlatans. It was carefully revised by the Attorney of the Board, who has no question as to its validity. As it will soon be in effect in nearly every town in the State, except Louisville, I thought it might be of interest to your readers:

"Sec. 1. Be it ordained by the Board of Councilmen of the city of ——, That it shall be unlawful for any traveling or itinerant doctor to practice medicine in any of its branches within the limits of this city. To open an office for such purpose, or to announce to the public in any other way an intention to practice medicine, shall be an offense within the meaning of this ordinance: Provided, that nothing in this ordinance shall be so construed as to prohibit any reputable physician or surgeon from any other place being called to see a particular case or family, or to do a particular surgical operation in said city."

"Sec. 2. Any person convicted of a violation of Section 1 of this ordinance shall be fined the sum of one hundred dollars for each day so engaged in the practice of medicine."

"Sec. 3. This ordinance shall be in effect from and after its passage."

J. N. MCCORMACK,
Secretary.

It will be seen that the above has become the law in seven important Kentucky cities, and that it is likely to pass, approved by the municipal authorities of every town in the State except, perhaps, Louisville.

Here the difficulties in the way of its adoption must of necessity be greater than elsewhere. First, because the press, that profits by their advertisements, may exert its powerful influence in favor of the peripatetic charlatans; and second, because the public, who are fairly represented by our city fathers, are not educated up to the importance of suppressing these getters of money under false pretenses.

The Secretary is to be commended for the vigorous manner in which he has conducted the warfare against these enemies of science and humanity. The lovers of truth and the promoters of legitimate medicine need not despair of final triumph. "The mills of the gods grind slowly, but they grind exceeding small," and the day is not far off when the public will learn that it is better when sick to trust to educated and legally qualified physicians than to put faith in quacks, mountebanks, and over-advertised nostrums.
Notes and Queries.

D. Hayes Agnew.—Dr. D. Hayes Agnew, Emeritus Professor of Surgery and Honorary Professor of Clinical Surgery at the University of Pennsylvania, and the leading American surgeon of his time, died at his home, 1601 Walnut Street, Philadelphia, on Tuesday afternoon, March 22, 1892, in the seventy-fourth year of his age.

His was a complete life, as has been said—complete in every sense in which life can be made complete. Happiness, honor, and comfort came to him in increasing years. It was complete too in the time of his birth, for he saw medicine and surgery grow to great sciences in his lifetime, and he possessed the ability to keep abreast of all advances. In this he was as fortunate as his fellow professor Leidy was in the domain of biology. This characteristic of keeping abreast with the times he ever preserved. He used to the last the latest medicines and the most modern instruments. His clear judgment showed him in later years the tremendous results which might be accomplished under antiseptic surgery, and he became one of its first advocates, although he could have retarded terribly this innovation in surgery. It is said that at the time of the demonstration by Harvey of the circulation of the blood no physician over forty believed in it; but Dr. Agnew, although the leading American authority, revolutionized his views on surgery constantly up to the time of his death.

Undoubtedly the wonderful reputation which he gained in later years was due to the very solid basis on which it grew. He had spent many long years of hard work and careful thought before he sprang into prominence. His wonderful skill and ease in operating were due partly to his wonderful knowledge of anatomy and partly to his great natural dexterity. He never had to stop to think about the relations of anatomy. A question in anatomy was answered by him as easily and as naturally and as apparently without effort as if he were reading an open book. While he was a most brilliant operator he always conscientiously avoided brilliant surgery, unless the patient's interest demanded it fully. He had no sympathy with operators who worked simply for their own fame or own record. Sympathetic and gentle to an extraordinary degree, years of experience and training had not hardened him to the necessities and desires of his humblest patient.

His influence in the councils of the University of Pennsylvania was unsurpassed. He was always on the side of progress and improvement in medical education, and to him must be attributed a large share of the prominence and prosperity of the medical department of the University at the present time. His relations with medical students were particularly close and cordial. They all loved him dearly and esteemed him highly, and it is not too much to say that to the many thousands that have graduated under him he has been to all the highest type of what a medical man should aim to be.

His singular coolness and demeanor while operating, combined with his remarkable tenderness, are explained perhaps somewhat when it is told, what is not generally known, that he never operated without asking previously divine support and guidance. In character of an intensely religious nature, he never undertook any serious step in professional or personal life without such assistance.

By his lifelong yet intensified devotion to his beloved calling, by his pure, incessant surrender of self to the exacting demands of an enormous practice, and by his lofty professional and Christian character, he rose amid the plaudits of his brethren to be a master in medicine and the chief in surgery.—University Medical Magazine.

*Editor American Practitioner and News:

Answers to Questions about the Muriate of Calcium, etc.—This is a fixed salt, CaCl₂. It acts as an alternative, rather as a protective to healthy tissues. It is not claimed that this salt will cause diseased tissues to be thrown off, but that it will so protect and strengthen other tissues that they will resist the further progress of the disease.

When I first commenced to use it much trouble was incurred in procuring a pure article. Some of our pharmacists confounded the chloride with chlorinated lime, and insisted they
were synonymous. I prefer the rolled; when dissolved in water a limpid solution is the result. That which is fused into lump has too much color, making a milky solution.

The chloride is not an unpleasant medicieue, odorless, slightly styptic to taste, which last quality is lost when the drug is taken in milk. Its use should be continued from eighteen months to two years.

I long since became dissatisfied with hypophosphites, and, like my patients, disgusted with cod-liver oil.

I would not hesitate to give this salt in cases where the tissues were broken down. I believe that it will arrest the further progress of tuberculosis; even when a cavity is formed push the remedy. You will find, perhaps, the purulent, lumpy expectorations will change to that of a thin whitish sputa, and then you may hope for collapse of the cavity, subsequent cicatrization, and the patient to be once more upon his feet. But we can not trust confidingly to its therapeutic powers in such cases, as we can in those reported December 19, 1891.

Three new cases are added to my list, all in the incipient stages. Of these I will keep a faithful history and report accordingly.

The salicylated buttermilk is a good therapeutic agent; the urine will throw off the urates and clear up sooner with its use than from colchicum, the carbonates or the bicarbonates. In one case of extreme suffering and sleeplessness morphine hypodermically was used.

In all anemic cases I would give the following:

| Ferri et pot. tart | 5 ss |
| Fowler’s sol. | 7 1/2 iv |
| Glycerine | 5 hi |
| Aq. cinna mo | 1/2 hi |

Mix. f. Dose from one to two teaspoonfuls.

This is acceptable to most stomachs and easily assimilated.

ROBERT DURRETT, M. D.

MINOMA, KY.

THE FAMINE IN RUSSIA.—We are now in the presence of a great calamity, and it is our duty as men of humanitarian science to do all we can to enlighten every one whom we are able to influence on a subject that must come home practically, to some extent, to every one. The danger of famine is famine fever, and famine fever, when once it is established, is a disease which shows no respect to distinctions. It spreads from the famished to the unfamished. As we have seen it, famine fever is a special pestilence of the remittent type, very fatal, easily communicable, and running a course, when once it is lighted up, uninfluenced by any specific remedy. It is as if the starving people generated it, as the neglected occupants of the gaol, before the time of Howard, generated the malignant typhus which made the “Black Assize,” and many more assizes equally black, the histories of which have never been told. It is a fever very unmanageable in respect to individual sufferers, and when it has gained its ground it is as unmanageable in respect to its ravages in communities. The grand sanitary maneuver is to prevent its commencement. In the Irish famine we did not prevent its birth, and we know the cost that was paid for our negligence. In the cotton famine of Lancashire we succeeded in preventing its inception, and we have ever since felt the triumph of science in that success. We learned also in that triumph how comparatively easy a thing it is to accomplish success, even under great pressure. Whether the Russian authorities have the means at hand to follow our example let the special report we this day publish tell. The Russian peasant, living on such bread as we have subjected to analysis and describe to-day, must already be on the verge of starvation before his exposure to actual starvation begins. His tastes, moreover, are little cultivated for any new supplies that may be sent to him from abroad. These are ominous facts; but they should not stand in our way in the attempts to stop at its beginning a disaster the end of which, if it be allowed to go on, must be perilous in these days of inter-communication to the whole world. How the assistance of this country can be best administered is a difficulty of supreme importance. Money we can raise; but money, like the bag of gold which the starving traveler found in the desert, hoping for his life’s sake that the rich coins were dried nuts, may be more easily thrown away than usefully applied. For our part, we admit that at the present we do not see any method of application of means other than by the transportation of food. But what food can be sent to
supplant the stuff we have analyzed, and, in the face of the obstacles which lie in the way of distribution, how can the starving people be fed with what is offered to them? — *London Lancet*.

**Osler's Practice.**—The appearance of a new work on The Principles and Practice of Medicine, by William Osler, M.D., Fellow of the Royal College of Physicians, London; Professor of Medicine in the Johns Hopkins University, and Physician-in-Chief to the Johns Hopkins Hospital, Baltimore, is an important event in American medical literature. The work is issued by the great publishing house of D. Appleton & Co. In their notice the publishers say:

"Written, as it has been, from the standpoint of a long and practical experience, an experience that has kept his author constantly abreast of the advances in medicine, it stands to-day as the practical exponent of modern methods and modern medicine. The author, Dr. Osler, is too well known as a teacher, clinician, and writer to require any introduction to the profession of either America or Europe. While his connection with the leading hospitals and medical colleges of both continents has given him an international reputation, it has endowed him with a particular fitness for the task of preparing a text-book of practice which is in its essential features an ideal work on the subject."

**American Academy of Medicine.**—The following topics are promised for discussion at the seventeenth annual meeting of the American Academy of Medicine at the Cadillac Hotel, Detroit, Mich., on Saturday, June 4, and Monday, June 6, 1892:

1. Essentials and Non-essentials in Medical Education, the address of the retiring President, Dr. P. S. Conner, of Cincinnati.
2. The Value of the General Preparatory Training afforded by the College as compared with the Special Preparatory Work suggested by the Medical School in the Preliminary Education of the Physician, a paper by Dr. T. F. Moses, of Urbana, O.
3. Does a Classical Course enable a Student to Shorten the Period of Professional Study? a paper by Dr. V. C. Vaughan, of Ann Arbor, Mich.
4. The Value of a Collegiate Degree as an Evidence of Fitness for the Study of Medicine, a paper by Dr. L. H. Menter, of Chicago.
5. The Value of Academical Training Preparatory to the Study of Medicine, a symposium by Drs. H. B. Allyn, of Philadelphia, W. D. Bidwell, of Washington, and Elbert Wing, of Chicago.
6. The Newer Medical Education in the United States, a symposium by Drs. W. J. Herdman, of Ann Arbor, Charles Jewett, of Brooklyn, and Elbert Wing, of Chicago.

Some other papers are partially promised, and the usual reports may be expected from the committees.

Members of the profession are cordially invited to be present at the sessions of the Academy.

**Typhus Fever.**—In his report on the health of the city for the week ending March 19, Dr. John T. Nagle, Deputy Registrar of Records, says: "The deaths from typhus during the week were 13, which makes a total of 20 deaths from this disease since January 1st. Of the number of fatal cases, four were employees of the Board of Health, two employees of Riverside Hospital, North Brother Island, one of the Reception Hospital, and a policeman of the sanitary squad. These contracted the disease while in the service of the Board of Health, and their lives were heroically given as a sacrifice to their zeal in the discharge of their duties in guarding and protecting the public from this terrible infection. Besides the four employees who have died in its service, there are still three of the employees of the department sick with typhus fever—one a sanitary policeman, and two employees of the Riverside Hospital, who contracted the disease while in the discharge of their duty. The disease, owing to the excellent and vigorous management of the Board of Health, seems to be stamped out,
and the city saved from typhus epidemic, which would not alone destroy many valuable lives, but would injure the commercial prosperity of the city. A singular observance of this disease was the very high percentage of deaths of the employes of the Board of Health, who contracted the disease from the Russian immigrants, and the low death-rate among the immigrants themselves. Whether this is due to enervation caused by overwork or to national characteristics is not clear at present." Within a few days after this report the number of deaths from typhus was swelled to 29. As the total number of cases reported up to this time was 184, this is a mortality of $\frac{17}{3}$ per cent, and it may yet be increased to something like 20 per cent by deaths among the quarantined patients and the attendants at North Brother Island.

*Boston Medical and Surgical Journal,*

**The Prevalence of Glanders in Great Britain.**—There is only one serious disease of horses which is communicable to man, and which for this reason, if for no other, we have an interest in seeing diminished or suppressed. This is the specific eruptive fever called "glanders." Though it has been known as affecting solipeds from the earliest times, yet, strange to say, it was not until this century was well advanced that its transmissibility to the human species was discovered; and in this direction the observations of Elliotson in this country, and Rayer in France, were of great importance. Their conclusions have since received ample corroboration, and now it is a well-recognized fact among medical men and veterinarians that the malady can be conveyed to man, and in a more or less virulent and dangerous form. In him it is not invariably fatal, as it is in the horse, sooner or later, for cases of recovery in the human subject are on record; but it is, nevertheless, a very grave disorder, and the prognosis must be always doubtful and serious. Though special to equines, it can be conveyed to many other species of creatures besides man, the ass being particularly susceptible, and the ox altogether insusceptible.

Glanders is very much less prevalent than formerly. In the pre-railway days when horses were so extensively employed in road traffic of all kinds, it was a veritable plague, and there were few stables in which it did not exist. Horses suffering from it were regularly worked, and in the cavalry and artillery corps it was extremely rife. It occasioned great losses in horse establishments, and there can scarcely be a doubt that many people also died from it, though its nature in them was not suspected. Indeed, its contagiousness in horses was not universally recognized until the beginning of this century in England; while in France it was only about the middle of the century that chronic glanders was admitted to be transmissible from horse to horse. As a consequence, precautions were seldom adopted to check the contagion, and curative measures were usually preferred to those of a preventive kind. It was also supposed to be of spontaneous origin, and ascribed to all sorts of influences. But, with the progress of veterinary medicine and better notions of horse sanitation, a great change has been effected in the prevalence of glanders. It has been for some years banished from our military stables, and only exists to any considerable extent in some of our large cities, while believers in its spontaneity must be few indeed, and are certainly out of date.

It may, however, be considered doubtful whether all the cases that occur are reported; as, though this is one of the disorders included in the Contagious Disease (Animals) Act, yet there is reason to think that, from the way in which it is dealt with, it is more prevalent than the annual reports issued by the Government would lead us to believe. However this may be, it would appear that in 1891 only 1,357 outbreaks were reported for Great Britain, though this number was much in excess of that of 1890, when it was 937; in the former year the number of horses involved in these outbreaks was 2,315, and 2,064 of these were in London.—*London Lancet.*

**Prescribing by Telegram.**—Objectionable and dangerous as is the practice of issuing medical prescriptions by means of the press, or by letter, it may well be questioned whether the employment of the telegraph for the same purpose is not still more open to misuse. Novel and of more than doubtful expediency, this
custom is nevertheless not unknown. A case was lately reported in the daily press in which a patient thus received by wire instructions wherewithal to provide himself with physic. Thus furnished, he was somewhat annoyed to find that hardly any druggist could be induced to execute the informal mandate of his medical adviser. We do not wonder at this, and the less so that poisonous ingredients were included in the "order." Cases of this kind expose the patient and the practitioner likewise to more than one difficulty. There is first the delicate point of diagnosis. How is a medical man to understand and correctly treat ailments of which he has, except from a mere statement of subjective symptoms, no present—and therefore no certain—knowledge? It may be said, indeed, that previous examination will often afford a reliable clue, and, to some extent, this is true. Chronic states are doubtless in this respect quite different from more acute ailments, and their features are appreciable in proportion to their character and duration. Still, even in such cases the best results and the least anxiety must ever accompany a personal interview. As for medical treatment by promiscuous advertisement, this is nothing less than immoral. Returning to the telegram, however, we find in it yet another element of danger, in that it affords no reliable guarantee of correct statement. The prescriber's expressions may easily be misunderstood or misstated by the officiating clerk, thus committing the dispenser, if he will, to a matter of guess-work, and that perhaps in circumstances of critical importance. The druggist in such a case has no ready means of reference or amendment, his salutary influence as a check upon lapsus penae is impaired, and the risk of the confiding but too heedless patient is proportionately greater. Clearly, therefore, the wire affords no suitable medium for professional prescription, and its employment, even where it does not prove a means of mischief, is at least a serious error of judgment.—Ibid.

The Opium Controversy.—It is with opium as with alcohol. We are continually hearing from opposite standpoints "the truth" about it. As yet, however, the unpracticed hearer, however candid, finds himself so beset with contrary arguments that he has little chance of arriving at an exact opinion on the subject of its use or its abuse. We had occasion recently to notice the significant fact that a memorial condemnatory of the growth and sale of the drug, as now permitted by the Indian Government, had received the signatures of some five thousand British medical practitioners, a very considerable number of these having had, we may state, personal observation of the opium habit as practiced in China or India.

On the other hand, we have a mass of official Indian testimony—a largely drawn, moreover, from non-medical sources—which is opposed to the view that the use of opium has gravely prejudiced the health of our fellow-subjects in that country, that it is decidedly increasing, or that its manufacture there has any marked influence on the maintenance of opium-eating and smoking in China. According to this evidence, not only is the drug, if used in moderation, not injurious, but it is in some cases—notably those of persons exposed, as in Assam and Eastern Bengal, to damp and malaria—positively beneficial. It is conservative of physical endurance; it enables the consumer to live healthily on less food than he would otherwise require; it does not, as asserted, cloud his mental faculties; and, even if hurtful, it is so by reason either of adulteration with Indian hemp or of excessive indulgence. They assure us also that the Chinese objection to its importation is only pretense, and intended to protect the privileges of native producers. We observe, however, that even these advocates of its utility do not deny the capacity for mischief possessed by opium if indiscreetly taken. Neither do they dispute its essentially and strongly poisonous character. They show, moreover, no direct or indirect advantage worth naming as arising from its consumption, unless in the presence of illness or as a preventive of malarial infection. These facts, in our opinion, are quite sufficient to justify its restriction to purely therapeutic uses, the more so that it is, if we may trust the teaching of modern observation, by no means the best safeguard against malaria.
As regards the attitude of the Chinese Government, we may note a statement by the Viceroy, Li Hung Chang, in 1881, in which he represents upon moral grounds the encouragement given by this country to the opium habit in his own, and declares that the opium war must be taken as China’s ineffectual protest against our action. Our ambassadors to China, Sir Rutherford Alcock and Sir Thomas Wade, unlike some critics less favored as to means of observation, were convinced of the sincerity of these protestations.

In Burmah, it is said, matters are coming to a condition no more hopeful than that of her greater neighbors, foreigners and the natives alike indulging freely, and with obvious injury to health and morals, in the same seductive habit. In the face of such facts as these we confess that we can see but one way of escape from the difficulties which surround this question; that is, the legal restriction of opium to its use for purely medical purposes.—Ibid.

TREATMENT OF SMALLPOX IN WEST AFRICA. Mr. Heli Chatelain, at present a consular officer of the United States in Portuguese West Africa, has been something of an explorer and philologist for that benighted region. He has also contributed to the American journals occasional observations regarding the diseases of Angola and its "hinterland." In one of his letters he describes the aboriginal management of variola: "One day I came upon two little children sitting on a mat in front of a hut; they were covered with pustules and smeared with some dirty-looking stuff. Their mother, by their side, was driving the flies off the poor little patients; it was a pitiful sight. Farther on I noticed other cases in various stages of the terrible scourge, smallpox. When the pustules heal up, each one leaves its white mark, lasting a month or more, so that the convalescent looks very strange with his body dotted all over with white spots. The natives of this district follow this plan of treatment: When the pustules are formed, they are opened with the sharp point of a strong grass-stalk; then the body is rubbed with water in which bruised tobacco leaves have been boiled, after which a layer of ashes, mixed with pounded kafoto leaves, is smeared over the body. When suppuration is over, the patient is smeared with a mixture of castor oil and ground lukula wood. The latter is red, and gives the painted patient a ghastly appearance."—Journal American Medical Association.

HOW TO IMPROVE THE POSITION OF THE PROFESSION.—Dr. Orlando Jones, in his presidential address to the Harrowgate Medical Society, took for his subject the possibility of improving the position of the medical profession. He infers from the writings of Pliny, the medical learning of the Druids, and from those of Ptolemy, that their wealth was equal to their learning. Such being the honored and happy case of the ancient representatives of medicine, he argues that it should not be otherwise with its present practitioners. He does not seem to look for any amelioration in the position of the profession by attacking the Council of the Royal College of Surgeons, or by a mere increase in the direct representation of the profession in the Medical Council. These are his negative views. The first of his positive suggestions for improving the tone of the profession is the introduction of a law enforcing at least one year's apprenticeship before the commencement of medical study; the second is the formation of a fund for the benefit of the profession, encouraging thrift among the active and giving help to the less fortunate. There is something to be said for both suggestions, but we confess to thinking them entirely inadequate as the sole levers by which the positive tone and power of the profession are to be raised.—London Lancet.

THE SO-CALLED FLYING MEMBRANE IN MAN. Basch (Zeitschrift für Heilkunde, Vol. xii, Part vi, 1891) describes minutely the deformities which he observed in a child. Several parts were malformed, but the author calls especial attention to the so-called flying membrane, "flughaut." This deformity occurred in both lower extremities. Both thighs were abducted, and rotated outward and slightly flexed at the hip. Between the thigh and the leg there was stretched a fold of skin which formed a triangle, with the knee as the apex, whose base
measured three and a half inches, and height three inches. Along the base of the triangle were tendons which proved to be the flexors of the leg, together with the tendo-Achilles. The leg was strongly flexed on the thigh. Examination after death showed this membrane to be formed partly of muscles and partly of skin. For the minutiae of this interesting case the reader is referred to the original article.—University Medical Magazine.

The Sense of Equilibrium.—Our Vienna correspondent writes as follows: At a recent meeting of the Vienna Society of Physicians, Dr. Kreidl, Prof. Exner’s assistant, reported on the experiments he had made upon deaf-mutes concerning the physiology of the labyrinth. Touching the experiments made on this subject by Flourens, Goltz, Mach, and Breuer, he pointed out that the membranous canals of the internal ear should be regarded as the peripheral part of the mechanism of the sense of equilibrium, the sensations of the disturbance of which he takes to be produced by the flow of the fluid in the ampulla and in the membranous canals. If the views of physiologists on the function of the otoliths and the membranous canals be true, it would have been expected that anomalies of the sense of equilibrium should be found in deaf-mutes. Purkinje had previously observed that if a person is made to rotate on his own axis the eyeballs were moved to the side as in nystagmus. This in Dr. Kreidl’s experiments was not observed in deaf-mutes to any very large extent. Dr. Kreidl from other experiments is led to regard the otolithic organs as a statical sense.—London Lancet.

Children’s Free Hospital.—The Children’s Free Hospital, No. 220 East Chestnut Street, opposite the Louisville Hospital, is now open for patients. The purpose of the institution is to take into its wards and care for, without charge, sick and injured children not afflicted with a contagious disease. The attention of trained nurses, food, lodging, medicines, etc., are supplied free.

No medical or surgical staff is attached to the Hospital, but every patient is left to the attention of the surgeon or physician who placed the child in the Hospital, or to the choice of the parent or guardian of the patient.

There are now twelve children of different ages, afflicted with various diseases, undergoing treatment in the Hospital, and several have been discharged cured since its opening.

Notice.—The committee appointed at the last meeting of the American Medical Association to consider the best means for promoting the prosperity of the sections of the Association will hold an adjourned meeting in the Hotel Cadillac, Detroit, Mich., June 6th, at 3 p.m.

Members of the committee are requested to notify the chairman of their intention to be present at this meeting.

The committee would esteem it a favor if each member of the Association would communicate in writing his or her views concerning the best measures for promoting the development of the sections. Such communications may be sent to the Chairman of the Committee.

John S. Marshall, M.D.,
Chairman.

The forty-third annual session of the Medical Association of Georgia will be held in Columbus, Ga., April 20, 21, and 22, 1892. Members of the medical profession are cordially invited to attend.

Anti-Corset Meeting.—We learn from a foreign contemporary that for a long time there has been a strong feeling in America against the corset, especially among the women of Canada. Recently in a town in Ottawa a largely attended anti-corset meeting was held, at which all the ladies present made a vow that they would no longer be slaves to that particular fashion. In the vicinity of the building in which the meeting was held, a large bonfire was built, in which all the corsets belonging to the party were thrown.

Prof. James Ross, M.D., LL.D., F.R.C.P.

By the death of Dr. James Ross, which took place at his residence in Manchester, on February 25th, from cancer of the stomach, we lose not only a most distinguished physician and teacher of medicine, but one of the fore-
most of English neurologists, whose fame had extended far beyond the borders of England, and whose name and works were known all over the scientific world.—London Lancet.

A Germ Maniac.

For five long hours I work on germs
In hanging drop of rich beef-tea;
Germs which, beneath the microscope,
I strain my eyes to see.

I bake them, boil them, roast them too,
Or poison those I find;
I steam them, cage them, then go home,
And leave the germs behind.

Behind! Oh woe, oh woe is me!
They go where'er I go—
Before, behind, without, within,
Around, about, below.

Thousands and thousands in my mouth,
And thousands in my hair,
I fear to breath them in my lungs,
With every breath of air.

I know they rest upon my cheek,
I brush them with my hand;
They're on the hand!—I wash them off;
But water is their land.

I seek the cooling air of night;
The earth is dark, the hour is late;
The stars upon the heavens lie,
Like germs upon a plate.

Germs, germs by day and germs by night,
Germs in my brain must be,
Unless I think of something else
They'll make a "stick" of me!


Army and Navy Medical Intelligence.

OFFICIAL LIST OF CHANGES in the Stations and Duties of Medical Officers of the U. S. Marine Hospital Service, for the four weeks ended March 26, 1892:

Bailloche, P. H., surgeon, to inspect unserviceable property at Port Townsend, Washington, March 9, 1892. Detailed as member of Board for physical examination, officer Revenue Marine Service, March 26, 1892.

Purviance, George, surgeon, ordered to Washington for temporary duty, March 5, 1892.

Austin, H. W., surgeon, to inspect Service at New Orleans, Savannah, and Charleston, and the Gulf and South Atlantic Quarantine Stations, March 3, 1892.

Irvine, Fairfax, surgeon, detailed as medical inspector of immigrants, port of Boston, Massachusetts, March 3, 1892.

Carmichael, D. A., passed assistant surgeon, to inspect the San Francisco Quarantine Station, March 7, 1892.

White, J. H., passed assistant surgeon, ordered to South Atlantic Quarantine for temporary duty, March 26, 1892.

Kingman, J. J., passed assistant surgeon, to proceed to New York on special duty, March 7, 1892.

Perry, T. B., passed assistant surgeon, granted leave of absence for thirty days, March 1 and 14, 1892.

Guiteras, G. M., assistant surgeon, ordered to examination for promotion, March 23, 1892.

Brown, B. W., assistant surgeon, assigned to temporary duty at San Francisco Quarantine, March 14, 1892.

Eager, J. M., assistant surgeon, granted leave of absence for thirty days, March 1, 1892.

Decker, C. E., assistant surgeon, detailed as recorder Board for physical examination, officer Revenue Marine Service, March 26, 1892.

PROMOTION.—Cobb, J. O., passed assistant surgeon, commissioned by the President as Passed Assistant Surgeon, March 23, 1892.

SPECIAL NOTICES.

Pepsin is undoubtedly one of the most valuable digestive agents of our Materia Medica. PROVIDED a GOOD ARTICLE IS USED. ROBINSON'S LIME JUICE AND PEPsin, AND AROM. FLUID PEPsin (see this journal), we can recommend as possessing merit of high order.

The fact that the manufacturers of these palatable preparations use the purest and best Pepsin, and that every lot made by them is carefully TESTED before offering for sale, is a guarantee to the physician that he will certainly obtain the good results he expects from Pepsin.

To WILLIAM B. WARNER & CO.:

Bromo Soda.—On account of my happy experiences with Bromo Soda in the case of my daughter—who, by the way, has Incipient Phthisis—and as every true physician should, when a remedial agent of undoubted value is put into his hands, I feel it incumbent upon me to make known its therapeutic value. For a length of time my daughter had suffered most excruciating pain from headache, accompanied with most debilitating nausea. Remedy after remedy was prescribed without accomplishing more than a negative result, until we almost despaired of affording her any permanent relief. My attention about a year or a little less ago, in England, was called to Bromo Soda as being likely to afford relief. Some of it was obtained from F. Newberry & Sons, 1 King Edward Street, London, E. C. Moderate doses at first were exhibited to see how the irritable stomach would receive it. Finding that it did not disagree, the dose was gradually increased till the urgent symptoms began to subside, and it affords me great pleasure to inform you that, after three months persistent use of the Bromo Soda. I feel assured she is permanently rid of the two difficulties already referred to, and her general condition better than for several years.

Its gentle, at the same time powerful, sedative action certainly places it in the front rank of the remedies controlling the action of the Pneumogastric Nerve, and the entire medical Profession should cooperate with you in making known its value as a reliable therapeutic agent.

C. C. PERRY, M. D., 211 W. 42d St., New York.
Original Articles.

NOTES ON PLASTIC OPERATIONS ABOUT THE EYELIDS.*

BY J. MORRISON RAY, M. D.
Lecturer on Ophthalmology, University of Louisville.

The parts about the eyelids, on account of their great vascularity, present a fertile field for the employment of the surgeon's ingenuity in relieving deformities by plastic operations. Under modern surgical methods large portions of skin can be successfully transposed bodily to the eyelids, and extensive deformities can be corrected by sliding, twisting, and pedicled flaps. A number of operations of this character are described and pictured in books on ophthalmology and general surgery. Yet most deformities about these parts differ so in the amount of distortion present that each case is a study in itself, and can not always be corrected by following the stereotyped operation. During the last few years I have seen several cases calling for surgical interference for the relief of unsightly deformities in this locality. Two such cases I have presented to this Society. They were cases of extensive burns of the entire side of the face, in which there was so much cicatricial tissue that no operation of a shifting or sliding nature could be considered. In one I transplanted a piece from the arm, and, while most of the flap adhered in its new position, the contraction that followed very much lessened the ultimate good result. In the other case the edge of the lids were fresh-

*Read before the Louisville Medico-Chirurgical Society, April 1, 1892.
and observing the results in the hands of others, I believe it should never be instituted. In its stead I have tried electrolysis where the hairs were few in number or scattered throughout the length of the lid, and transplantation where the turning was extensive.

In a case where simply one large bunch of cilia turned against the cornea I tried a method successfully that I have seen tried several times, yet can find no record of it in literature. It consists in splitting the free edge of the lid back of and corresponding with the location of the offending lashes. After the hemorrhage has stopped and the incision is made to gap well, I have inserted small pieces of skin removed from the arm, thus introducing a wedge that will nearly always live and form a support that effectually pushes the lashes away from the cornea.

Where the trichiasis is more extensive I have instituted the well-known operation of Jaesche-Arlt. This consists in splitting the lid along its free edge, well back of the hair bulbs, then removing an elliptical piece of skin from the outer surface of the lid and by stitches closing the wound, thus drawing the strip containing the lashes well up, and allowing the incision along the free edge of the lid to gap widely and heal by granulation. This operation will fail where the tissues of the upper lid are abundant and lax, for the contraction in the conjunctival will continue, and in a short time, to our dismay, the lashes are again found rubbing against the cornea.

I have recently operated on a case in which there was intense trichiasis with much redundant tissue and laxity about the lid; I first cut the external canthus, hoping that by dividing the external canthal ligament I would lessen the tendency to incurving of the edge of the lid, and thus carry the lash away from the cornea. This, however, only had a slight effect, and I then performed the following operation: The incisions were the same as in the Jaesche-Arlt operation, which I have just described, yet when the elliptical piece of skin was dissected up it was left attached at its base, the sutures were introduced and then the flap was turned and placed in the gap along the free edge of the lid. Only a few stitches were required to hold the flap in the new position. In a few days it had firmly united, then it was cut off at its base and the stitches removed. Now, only two weeks after the operation, there is found a narrow strip forming a support for the lashes and effectually preventing them from coming in contact with the cornea. As contraction goes on the ridge now visible will lessen and the lashes will assume their normal position, yet be prevented from touching the cornea. I was surprised at the readiness and quickness with which the narrow strip of skin adhered to its new position.

Usually in addition to the ingrowing lashes we have an inturning of the edge of the lid, so-called entropion, and then the operator must aim at a restoration of the lid border as well as the cilia. The modification of Von Burrow's operation by Green has seemed to me to be the most effectual. In this operation an incision is made on the conjunctival surface of the lid about two lines from its free edge, extending from the outer to the inner corner. It includes both conjunctiva and tarsus. Then on the skin surface an elliptical piece is removed and a number of deep sutures are introduced, going through the orbicular muscle, and in tying them the edge of the lid is turned as far out as possible. The cut on the conjunctival surface gaps, and is left to granulate. This operation will also fail if there is an abundance of lax tissue in the lid. I think that this operation can be modified in the same manner as the one I have described, namely, the elliptical piece of skin left attached at its base, and be twisted into the gap on the conjunctival surface. The objection to it would be that the piece transplanted is skin and the gap to be filled is in mucous membrane. I believe that if its base be cut as soon as we are certain of its viability, that in a short time it would be transposed into mucous membrane. I once saw the late Dr. Agnew transfer a piece of skin from the outer surface of the lid into the orbit and make a cul-de-sac for the purpose of retaining an artificial eye. The case, when I last saw it, showed evidence in the flap of transformation going on from skin into mucous membrane. This is most likely to occur if the connection to the skin by the base be cut as soon as evidence of life in the flap is shown. I have attempted
several operations in transplanting mucous membrane in the treatment of symblepharon, or adhesions between the eyeball and eyelid, but my success has not been such as to call for particular comment.

LOUISVILLE.

OCCIPITO-POTERIOR POSITIONS.

BY JOHN G. CECIL, M. D.
Assistant to the Chair of Obstetrics and Gynecology, University of Louisville.

This brief report of two cases of occipito-posterior position of the vertex, with failure of anterior rotation, is submitted with a view to eliciting discussion as to the cause or causes of failure of anterior rotation of the occiput, and with reference to the best means of correcting the same.

Case 1. Mrs. D., age thirty-two years, was seen in consultation with Dr. P. B. Scott, in labor with her first child, a previous pregnancy having terminated in a miscarriage at five months. When I saw her she had been in labor about twenty hours, the head was well down in the pelvic cavity and the cervix dilated. It being evident that labor would not progress after the occiput had rotated to the hollow of the sacrum, the forceps were applied. I would here say that the pelvis of the mother was normal in shape and size, and that while she was not muscular, yet she was compactly built. After extremely hard work on the part of my associate and myself, a seven-pound child was delivered. The child lived thirty-six hours, and died in convulsions. The perineum was torn to the extent of three quarters to one inch; this was immediately restored by the primary operation, followed by a successful result. The mother made a very satisfactory recovery, with the exception of a small vesico-vaginal fistula, the existence of which was discovered on the third day, and which was cured by an operation three months afterward.

Case 2. Mrs. C., age thirty years, a stout, healthy woman; pelvis large and roomy; in labor with her third child. Labor began at six o'clock in the morning, water escaped at twelve. The head was well down in the pelvic cavity, the anterior fontanelle easily felt im-

Read before the Louisville Clinical Society, March 22, 1892. For discussion see p. 272.
purpose by different means. The introduction of the hand for the purpose of effecting version by the vertex, under an anesthetic, was strongly advocated by Parry, of Philadelphia. Where the hand of the accoucheur is small I think this may be done to advantage, but it is not practicable nor safe as a general rule. The obstetric forceps are generally the last resort. Under no circumstances can the forceps be used or regarded as an aid to rotation, except as traction is being made, rotation may spontaneously occur. It is surprising to note so good an obstetric authority as Tyler Smith advising: "In delivery with the forceps in occipito-posterior positions the head should be slowly rotated during the process of extraction, so as to bring the vertex toward the pubic arch, and thus convert them into occipito-anterior positions."

It is hardly necessary for me to dwell upon the various theories as to the cause of failure of rotation. I believe that most cases will have to be delivered by means of the forceps, and I also think in this latter case ninety nine obstetricians out of a hundred would have advised forceps, and possibly it would have been the proper treatment, notwithstanding the fact that the child was delivered without forceps and without danger to the mother. The majority of cases, I think, will be found to be those in which the women have borne large numbers of children, or have suffered to a large extent loss of the floor of the pelvis. When it occurs in women with good, strong floor to the pelvis, it is generally due to disproportion between the size of the child's head and the passage through which it has to go.

**STOMACH-WASHING IN INFANTS.**

BY HENRY E. TULEY, M. D.
Senior Assistant Resident Physician, New York Infant Asylum.

Since the recommendation of this mechanical procedure by Epstein (Prague Med. Woch., 1880, No. 45), of Prague, in 1880, irrigation of the stomach for the treatment of gastro-intestinal diseases of infancy and childhood has been gradually more extensively used. It was not, however, until his second report in 1889, at Weisbaden, before the meeting of the Natural Scientists and Physicians, that its real value became recognized.

To Dr. A. Seibert (Seibert, Archives of Pediatrics, December, 1888), of New York, is due its introduction into this country, who, at a meeting of the Section of Pediatrics of the New York Academy of Medicine in November, 1888, presented the first report, comprising a series of cases of acute dyspepsia, and of acute and chronic enteric catarrh, with vomiting, in infants between seven weeks and one and one half years of age, which were successfully treated by lavage of the stomach, with and without medication.

Though extensively used for the past three years in New York, comparatively little is known of it elsewhere in this country. The object of this paper is to call attention to this valuable measure, describe the apparatus, its application, and briefly the indications for its use, with the report of a few cases.

![Apparatus Required.](image-url)

The apparatus used in stomach-washing consists of a soft rubber catheter, No. 13, American scale, about twelve inches in length (that of Whitehall and Tatum is perhaps the best, not being as flexible as Tiemans, which is used ordinarily). This is attached by a bit of glass tubing two or three inches long, by means of
which the contents of the tube can be noted as it flows through; and by a rubber tube to a glass or hard rubber funnel holding from one to three fluid ounces.

Plain lukewarm water, previously boiled, is the only material which should be used, generally not more than one pint being required to wash out the stomach thoroughly.

The child is seated upright in the nurse's lap, its arms being secured under a rubber sheet, with head resting on right arm of nurse and inclined slightly forward. With the left forefinger the child's tongue is depressed, and the tube passed backward into the pharynx. Advantage being taken of the child's gagging, which will occur from titillation of the pharynx, to pass the tube rapidly into the stomach. In most cases no oil or vaseline is needed on the tube, it should simply be wet before its introduction.

There is often some gas in the stomach, and if water is poured in the funnel immediately upon the descent of the tube, it is prevented from flowing into the stomach by gas in the tube and not by an obstruction at the eye of the catheter as one might imagine, a glance at the glass tubing sufficing to show whether tube is filled or not. This is obviated by elevating the funnel as high as possible, perhaps for half a minute, to allow the gas to escape. The funnel is then depressed below the level of the stomach to allow its fluid contents to siphon out, after which the water is allowed to run in, one or two funnelsful, this being immediately siphoned out in the same manner.

There may be lumps of curds which at first are too large to pass through the catheter; these can often be broken up and dissolved by again and again letting water in and out until they pass readily through the tube; or if this cannot be accomplished, the child may be made to vomit alongside the tube by overdistending the stomach with water, thus bringing up oftentimes masses of curds leathery to the feel, and thick, tenacious mucus which would have taken repeated washings to disintegrate, if indeed that could have been accomplished at all.

The stomach of a healthy nursing infant for the first few months of life is generally empty at two hours after feeding—that of an artificially fed infant perhaps a little longer, say two and one half hours—but in cases of indigestion curds are sometimes washed out four or five, and even eight hours after feeding, the period of stomach digestion varying with the character of the milk, the age and health of patient.

Should there be present considerable prostration and urgent thirst, as is often the case in acute processes, one or two ounces of water left in the stomach will relieve and quiet them, and the water will frequently not be vomited as it might be if given by the mouth, as has been shown in a series of cases of obstinate vomiting treated by gavage (Kerley, Archives of Pediatrics, February, 1892) in this institution during the past year.

The diet after stomach-washing and its method of administration is very important. No food should be given at all for at least two hours after the washing, and then only the blandest and most easily-digested.

It has been our custom in this institution, if the child is artificially fed, to put it on Malted Milk for twenty-four or thirty-six hours after the irrigation, not giving more than half an ounce at the first feeding.

If a nursing infant, and breast-milk is vomited after the stomach is washed, Malted Milk is tried for twenty-four hours in small amounts and the breast-milk then resumed.

Epstein, after washing out the stomach, puts children on albumen-water (dissolve whites of two eggs in two pints of water, first beaten up in water, then filtered) for twenty-four or thirty-six hours, and they are allowed gradually to return to the breast.

In the past two years in the New York Infant Asylum there have been fully fifteen hundred stomachs washed, and in no case has any evil resulted or any contra-indication been noted. It is very easily performed, though it seems like an operation of magnitude to those unfamiliar with its technique.

The following is a résumé of the history of forty-five cases of stomach-washing during the midsummer months of 1891, records of which were carefully kept. The average age was ten and one half months.

Ten were fatal cases of enterico-colitis, with
high temperature, prostration, etc., and vomiting. Stomach-washing effectually controlled vomiting in five cases. Of the remaining five cases, in one the autopsy showed extensive ulceration of the stomach at the pyloric end; one had suffered from chronic vomiting from birth, and in three both gavage and stomach-washing failed to control vomiting.

Thirty-two cases were of acute dyspepsia. In twelve of these there were intestinal symptoms, in six of which the temperature was above 100°. In all but one case from two to three washings were found necessary to control vomiting. In the remaining twenty cases, in which the temperature was 100° or below, with the exception of two cases (requiring two washings) only one irrigation was necessary.

Three were cases of chronic vomiting from birth, controlled with from one to three washings.

In all of the above cases the same precautions as to diet as related already were carefully carried out.

The following are illustrative cases:

Case 1. Louisa F., a well-nourished child, fifteen months old, fed on Mellin’s Food, with good gain in weight. In the afternoon of July 6th she was fed bread and Mellin’s Food which had been standing uncovered in the hot ward. She soon after vomited once, quantities of curds, and during the remainder of the afternoon had six thin and yellow movements. At eight o’clock there was quite marked prostration, face drawn and anxious, and quite cyanotic, with a temperature of 103°. Nothing could be retained, food causing gagging and retching when given. The stomach was washed shortly afterward, and two ounces of warm water left in the stomach, which was not vomited. Quantities of fine curds were removed by the washing. After a two hours’ rest the child was fed on Malted Milk during the remainder of the night, at intervals of two hours, only one ounce being given at a feeding. There was but one stool during the night, and no recurrence of the vomiting. From this time the child went on to perfect recovery.

Case 2. Joseph J., a robust, breast-fed baby, aged eleven months. Had made a rapid gain in weight. On July 23d his mother was away from the Asylum on leave all of the day, the child in her absence being fed on partially peptonized milk. At 11:30 p.m. the mother returned, and the child greedily emptied in a short while both breasts, which were filled with milk. During the remainder of the night it vomited five times, curds and sour milk, and had three thin and yellow stools. At nine the next morning the temperature was 100°; its stomach was washed and quantities of sour-smelling curds removed. Two hours later, at its first feeding, one ounce of Malted Milk was given. During the afternoon the child was nursed as usual, with no recurrence of the vomiting. There were no subsequent symptoms, and child made good recovery.

Case 3. Lulie J., a poorly nourished, breast-fed child, seven weeks old. The evening of July 20th the child was reported as having vomited part or all of every nursing during the day, the ejected material being curdled and sour. Temperature was 100°, and she had had two normal stools. The stomach was washed, a few curds and considerable mucus being removed. Nursing was stopped, and after a rest of one and one half hours Malted Milk was given, and continued until July 22d. During the night of the 22d she was nursed twice, and vomited after each nursing; stools good and temperature normal. It was again put on Malted Milk for twenty-four hours after stomach-washing, the nursing being then gradually resumed. The child made a good recovery, and had no more vomiting.

The best results in stomach-washing are seen in cases of acute dyspepsia in the initial stage with or without diarrhea and with no fever. Rarely more than one lavage is required.

It is indicated in acute gastro-enteric catarrhs with vomiting and fever. Usually two washings are necessary, but rarely more than three or four. It improves the tone of the stomach and diminishes the number of stools.

It is a valuable and effectual means of combating a troublesome symptom in gastro-intestinal diseases, as it mechanically rids the stomach of milk and curds which accumulate there, and which, unless removed, would pass into the intestines and produce irritation.
It is of use in those cases which have vomited from birth or have had continual regurgitation of food, as it removes curds and thick mucus, which is nearly always present with disordered digestion. In some cases it may be found necessary to continue the lavage for perhaps two weeks, at first washing once each day, then every other day, and so on as required; but in the majority of cases vomiting is relieved in from one to three washings repeated on successive days.

Stomach-washing is by no means a panacea in controlling this oftentimes troublesome symptom, nor does it preclude other treatment. It is far better than emetics, the disadvantage of which has long been recognized in the treatment of indigestion of infants, and if properly done is a simple, effective, and thorough mechanical procedure, and, so far as I have seen in a rather extensive experience with it here, is entirely without danger.

Perhaps in private practice there may be some objections raised to its use, as to all new measures; but these, I am sure, will not be offered when once the great benefits derived from its application are seen.

Mr. Vernon, New York.

Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, March 18, 1892. Dr. W. Cheatham, President, in the chair.

Dr. A. M. Cartledge: I have three specimens to present this evening, showing various kinds of ovarian cysts, removed from aged patients. The first specimen was removed from a lady sixty-four years of age, on the 22d day of February, 1892. The patient was very much run down in health by the grippe and mental depression. While we desired to postpone the operation, she was declining so rapidly that we decided to operate at once. The question in the case is whether the operation should have been performed, owing to her age and condition, her pulse having been 108 and 110 for three or four weeks. This was a very interesting case, the tumor probably weighing forty or fifty pounds. The sac contained seven different colored fluids. There were thirty or forty small cysts. Some of the fluid was thicker than starch paste, with all grades of consistency down to thin serum. The woman was got off the table very quickly because of the dread of shock. So many of the small cysts had to be broken in the cavity that we inserted a small drain, which was removed in twenty-six hours. She made a very remarkable recovery, sitting up the eleventh day after the operation. She is out of danger now.

The second specimen is a tumor taken from a lady sixty-one years of age, also a feeble subject—a little, emaciated woman. The tumor was discovered by myself in examining her for another trouble. Here you see the small cyst-like tumor, weighing probably when removed fourteen to fifteen pounds. We closed the wound in the abdomen without drainage, and the woman made a complete recovery.

The third one of this series is a very large ovarian cyst, taken from a woman sixty years of age. She desired to wait until after her sixtieth birthday before having the operation performed. This tumor weighed seventy-five pounds, was of five years' growth, growing very rapidly in the last two years. There were a good many adhesions, as you will see by the specimen. No drainage was used. The tumor was purely unilocular. The patient recovered.

I will also report a fourth case, which proved fatal. I operated on the patient in December, in the country, about six or seven miles from Corydon, Ind. The patient was a young man about twenty-eight years of age. The history was that he was taken with sudden pain in the abdomen, near the umbilicus, four days before. In twenty hours there was fecal vomiting and straining at efforts to evacuate bowels. Diagnosis was invagination of the bowel. His physician used morphia to control pain, and a high enema of water and glycerine. When I saw him there was marked peritonitis, so that no tumor could be felt. Pulse 120, anxious countenance, sub-normal temperature; great pain. From the history of the case I coincided in the diagnosis of intussusception. As the man was young, and the case without assistance hopeless, I advised and performed laparotomy. As
you will see from the specimen, there was invagination of eight inches of ileum into ileum, near the ileo-cecal valve. The bowel had already undergone necrotic changes. Unfortunately I had forgotten my bone plates, hence could not practice lateral anastomosis, and had to resort to resection. I did not see the man again, but I learn that he died in eighteen hours of continuation of the shock.

Dr. E. R. Palmer: In the case of the colored fluids, was the patient taking any aniline or medicines like methyl blue?

Dr. Cartledge: No.

Dr. W. C. Dugan: Age does not play much part in reference to ovarian tumors. I noticed a report some time ago, by Sutton, that in a great number of patients, ranging in age from seventy to eighty-two years, the results were about as favorable as in younger subjects.

Dr. Dugan: This specimen (biliary calculi) was removed from a patient aged seventy-two years. I saw him about a week ago, with history of colic and pain in his right lumbo-iliac region. I thought it was one of those cases of appendicitis, and advised him to go home, keep quiet, and take some salts to move his bowels, which he did. The next day he went to his work as street-sweeper, but found he was unable to do any thing, and went back home. I saw him Sunday morning, and he was suffering great pain, and I advised him to go to bed, which he did. He improved until this morning at five o'clock, when he went into a state of collapse, and remained in that condition until the operation was performed, this afternoon. I found that the gall-bladder had burst, and these calculi were found. These are only a few of them; many were lost.

Dr. Turner Anderson: How long did the patient live after the bursting of the gall-bladder?

Dr. Dugan: The patient is still living.

Dr. J. G. Cecil: I saw a case some time since similar to the one reported by Dr. Dugan—a woman about thirty-five years of age—in which the symptoms were entirely different. The symptoms were irregularity of the bowels, sick stomach, vomiting, nausea, intense pain in the region of the liver running back to the right shoulder. It took me some little time to fix

upon a diagnosis satisfactory to myself, but finally I excluded every thing else, and was rewarded by seeing afterward some little gallstones. But the ones in my case were lighter in color, evidently of recent formation. The patient responded very readily to the ordinary treatment.

Dr. J. A. Larrabee: Do I understand that these patients had no symptoms of bilious colic or jaundice in connection with these gallstones?

Dr. Cecil: There were all the symptoms of colic, but no jaundice.

Dr. Larrabee: Gall-stones of this size probably passed so readily along the duct that it would not require the time to produce the jaundiced hue. These, of course, are not as large as they are in many instances.

Dr. T. H. Stucky read a report of a case of sarcoma of the mamma:

Mary M., thirteen years old, well developed for her age, and enjoying good health, consulted me on March 10, 1892, about an enlargement of the left breast. She has never menstruated, has always had good health, and has not felt any inconvenience from the tumor until recently. Last summer she first noticed the enlargement, but paid no attention to it, as it was painless, remaining so until about a month ago, when she suffered from sharp, shooting pains through the growth, never at any time severe.

On examination I found that the left breast was much enlarged and the right one well developed. The left one was about the size of a well-developed mamma of a multiparous woman, smooth, firm, freely movable, and only slightly painful to the touch.

The consistency of the tumor was the same throughout, and the skin covering it was tense, and at the summit of the growth of a reddish-purple appearance, from enlargement of the superficial veins.

The axillary glands were not swollen. A diagnosis of sarcoma was made and extirpation recommended, to which she and her mother readily consented. The operation was done on March 16, 1892, by Dr. Dugan, assisted by Dr. Kirke and myself, and the entire growth removed. A microscopical examination was
made by Dr. Pope, who stated that it was a sarcomatous growth of the spindle-cell character. The specimen now before you confirms the diagnosis.

In looking up the history of the case, I find that only about two and six tenths per cent of these growths have been known to occur in patients under seventeen years of age. The only record I can find of it is in the encyclopedia of gynecology. We have looked over all the authorities to which we had access, and are continuing in the search. I can not find a case reported under the age of fifteen years.

Dr. Dugan: I made a careful examination, and in my judgment the trouble is beginning in the other breast. I would say that this form of growth in the breast of a girl is very apt to develop in the ovaries before she is far advanced.

Dr. W. L. Rodman: This is a very interesting case on account of age. The youngest case I can find reported is a girl fourteen years old. Henry reports a few cases at the ages of sixteen, seventeen, eighteen, and nineteen, but it is very uncommon even at twenty.

Dr. Dugan: I would like to correct the statement concerning age. There are several cases on record where this growth has occurred at the age of nine years. Agnew reports a number of cases occurring before puberty.

Dr. Rodman: I would state that the youngest case reported in Gross' book is fourteen years of age. If there are cases younger than this, they have been reported within the last few years, as certainly Gross would not overlook a case of so much importance as this.

Dr. Anderson: I saw recently an interesting case in the person of a child with varicella. The child had active, furious delirium twenty-four hours preceding the eruption, without much elevation of temperature and without sleep, the delirium terminating at once upon appearance of the eruption. As soon as the eruption came out the delirium subsided, the child slept quietly, and the case went on without any accident whatever.

Dr. Wm. Bailey: What was the temperature when the eruption came out?

Dr. Anderson: The child had no temperature at any time above 100° or 100.5° F.

Dr. H. A. Cottell: I was called recently to see a child, about ten years of age, who had a little fever. I did not consider it of any consequence, but a notable feature was intolerance to light. The temperature in the morning had been normal, but went up in the evening to 101°. The next morning the temperature was normal, but in the evening it went up again. I considered the case so trifling that I told the mother I would not call again. I was called about nine or ten o'clock, and found over the trunk and extremities a distinct scarlatiniform form of eruption. It was not scarlatina; the child had had that disease. It was gone in less than twenty-four hours. I took it to be such an eruption as some of us saw two years ago following attacks of the grippe. I did not make any diagnosis of this case, but think it could not be grippe. The medicines taken were quinine, phenacetin, and a little bromide. The patient had not taken large doses of any drug.

Dr. Larrabee: There are so many of these rashes in childhood that it is impossible to classify them. I would suggest that perhaps this little medication might have been the cause of the eruption, as quinine and phenacetin do sometimes cause a rash.

Dr. F. C. Simpson: One of my own children has recently had a rash of this character—a perfect scarlatiniform eruption—without any medication at all. A peculiar feature was that she complained of a continued itching of one of her feet. I gave her nothing, and in two or three days it passed off. We all know that medicines do sometimes produce these conditions, but in this case there was no medicine given. It is a peculiar condition, and I do not know what it is.

Dr. Cottell: I would be very glad if some light could be thrown on the subject. I hardly think that it was a drug eruption. I never saw quinine make an eruption, but have heard of it. I have seen eruptions now and then caused by bromide. I can not believe that this was a drug eruption.

Dr. E. R. Palmer: I want to report the discovery of a new mineral spring. Every one knows that in treating either acute or subacute venereal diseases one of the most important factors to deal with is the urine. I have had sam-
Dr. Bailey: I am very much pleased indeed to hear the statements concerning the use of the great remedy, water. In prescribing these mineral waters, I think it is the water that does the most good. Especially is this the case in Bright's disease. Water is a great diuretic, and we do not fully appreciate its value in treating diseases which call for diuretics. I believe that much good may be accomplished by flooding the bladder with water through the kidneys in a great many diseases, not only of the character described by Dr. Palmer, but in others as well.

Dr. D. T. Smith: The trouble in the use of fresh water as favored by Dr. Palmer is, that in many cases the stomach will not tolerate it in large quantities. Especially is this the case in persons who have the uric-acid diathesis. In line with Dr. Palmer, I also have a discovery to relate, and with it a proposition to make. Some three or four years ago my brother, in drilling a well near Glendale, Ky., came across a very superior character of mineral water, and I should like very much to have the members of the Society try it. All the expense you will be at will be the freight and breakage on demijohns. The well is made up of three separate streams: one the chalybeate water; next, sulphuretted hydrogen, with sulphate of magnesia and the usual sulphates; third, the saline water identical with the salt wells of Brandenburg, making a mixture containing every mineral ingredient to be found in such waters.

Dr. Cottell: I have always believed that "Aqua Pasteur" is just as good as most of the mineral waters, and I think that it is our duty as physicians not to encourage the use of mineral waters which are advertised to cure incurable diseases. It is possible that water containing no mineral matter may be very slow in absorption, while water that is slightly saline will be more readily diffused through the system. This point tells in favor of mineral waters.

Dr. Larrabee: I most heartily indorse all that Dr. Palmer has said in regard to the use of water. But one word, lest we spring too far out of line. There is a sort of law in the economy that very many medicines which are useful therapeutically practically require dilution with water for their own introduction into the
system. Such I think is the case with iron. It is often noticed that anemic, splanchnic, and hydremic patients derive great advantage from chalybeate waters, while the administration of iron in therapeutic doses has been of no advantage. Nature has her own way of doing laboratory work, often repelling medicines in the crude and concentrated state, which she needs and will readily assimilate in large dilution. I can not then go so far as to say that the mineral constituents of various waters are not essential. I do believe, however, that the principal beneficial ingredient of these waters is water. I desire to call attention to the use of water as an expectorant as well as a diuretic. In bronchitis and pneumonia of children I find that the enforced drinking of large draughts of water acts so beautifully upon the mucous membranes as to quite obviate the necessity of prescribing nauseous expectorants.

I wish Dr. Palmer's remarks to be extended to other diseases than those of the genito-urinary system, as water, being a strong diuretic, may be given with advantage in many other diseases.

Dr. Bailey: I beg leave to report a case—a lady, forty-two years of age, showing highly albuminous urine, general anasarca, supposed to be six months pregnant. The treatment not being sufficiently rapid, she acted on her own account, and used oil of tansy. Convulsions occurred soon afterward, terminating in death in sixteen hours.

Dr. Cottell: How much oil of tansy did she take?

Dr. Bailey: I do not know how much, she took it for two days.

Dr. Cottell: Was it not a case of acute oil of tansy poisoning?

Dr. Bailey: I do not know; never saw a case of acute oil of tansy poisoning. It is one of the characteristics of oil of tansy to produce convulsions.

Dr. Cottell: The reason I ask these questions is, that some six years ago I saw a girl who had taken a large dose of oil of tansy for the purpose of producing a miscarriage. She was perhaps two months gone in pregnancy. She suffered the most terrible tonic spasms I ever saw. The spasms were just such as characterize strychnine poisoning. She did not know how much she had taken, but thought the dose was about a tablespoonful. I administered emetics, used chloroform and chloral, and soon had the convulsions under control. The girl completely recovered, and did not miscarry.

Dr. Palmer: I would like to ask if Dr. Bailey's case miscarried.

Dr. Bailey: I did not intend to report the case in full. The case was under my care when the treatment was instituted, two or three days before death. I would say that the use of oil of tansy was not approved, nor known by me, nor was it approved by the family. She took many doses of it; her husband stated that probably she took quite a large dose the night in which her convulsions came on. He did not know what amount she took. The convulsions came on somewhere about midnight; being in a quite distant part of the city I was not summoned. Another physician was called, who attempted to treat the convulsions by means of hypodermic injections of morphia and atropine; what quantity was given I do not know, but I think somewhere about a grain or a grain and a half of morphia was injected, if I got the history right. I was called to see the case about four o'clock in the morning; the call came while I was absent from home. I declined to go at the time, and asked that a physician in her neighborhood be called, and that I would see her the next day. That physician was called, and, I think, administered morphia, being part of the one and one half grains that I mentioned. I saw her at nine o'clock the next day in consultation. She was unconscious, and never regained consciousness afterward, the case going on from bad to worse, dying about four o'clock in the afternoon. I made no vaginal examination, but the physician told me, who did make an examination, and in whom I have confidence, that she was pregnant, and that the fetal head could be very distinctly felt through the walls of the vagina. She died, I think, from failure of the kidney; perhaps the convulsions superinduced by the action of the oil of tansy played some part, as we know the physiological action of large doses of this drug is to produce convulsions. I think the convulsions would not have occurred at this time had they not been excited by means
of oil of tansy. There was no accumulation of urine; she was catheterized, and very little urine found. The urine mentioned as albuminous was passed three days before. No effort was made by the womb to relieve itself.

Dr. J. M. Ray: I would like simply to show the field of vision of a rather interesting case. A man, forty-three years of age, consulted me about three weeks ago, complaining of his eyes. Upon questioning him I found that he had consulted a number of different men concerning his eyes, and also his general condition, and they differed as to the kind and seat of the trouble. The history he gave me was, that he had been subject to a nervous affection for years. One day he became blind and remained so all day, about which he was very much alarmed. When I saw him his vision seemed to be perfect, but as he walked into the office I noticed a peculiar, irregular kind of gait, and upon examining his knee reflex I found that he had a very decided increase. On questioning he complained of rheumatic pains, as he called them. These, I presume, were due to a spinal lesion of some kind, the exact location of which I am not prepared to say. His visual acuteness was perfect, except a blind spot in the field of vision, which, on being marked out, represents a symmetrical scotoma coming up to the middle line in each field. I could find no lesion whatever, the fundus appeared perfectly normal; but a peculiar point is, that it is not hemiopia, but a semi-circular scotoma in the field of vision of each eye, which evidently is due to lesion somewhere about the region of the right optic tract. I assume that probably, when he had blindness existing all day, he suffered from a hemorrhage somewhere about the optic tract on the right side.

Dr. Palmer: Had he ever had syphilis?

Dr. Ray: He denied having had syphilis, and there is no local evidence in the eye of any trouble pointing that way.

Dr. W. Cheatham: I saw this case, I think, some time ago, and discovered his blind spot, which is the same as Dr. Ray has described.

Dr. Ray: He certainly has some lesion involving the cord and nerve centers higher up.

T. S. Bullock, M. D.,
Secretary.

Stated Meeting, April 1, 1892, Dr. W. Cheatham President, in the chair.

Dr. A. M. Vance presented a portion of diseased femoral bone removed from a boy about eight years of age. The boy had suffered with Bright's disease for two years, caused from prolonged suppuration, and the only possible chance of saving his life was by a complete removal of the diseased bone. I obtained the consent the parents, and, with the assistance of Dr. Dugan, the operation was performed. The patient was very weak and anemic. Administration of digitalis did wonders in relieving the anemia, and he has done well since the operation.

Dr. W. C. Dugan: As stated by Dr. Vance, I assisted in this operation, and just want to say that the whole time consumed was less than six minutes. This was at one time a common operation, but is now a very rare one.

Dr. Wm. Bailey: I believe that much good can be done in this form of Bright's disease by the absolute removal of the cause; that is, there will be less rapid progress afterward in this form of degeneration than in most others. It is the history of some of these cases, that if an operation is done removing the cause, notwithstanding the change in the kidney, the patients live for a considerable length of time.

The essay of the evening was read by Dr. J. M. Ray; subject, Plastic Operations about the Eyelids. (See page 257.)

DISCUSSION.

Dr. S. G. Dabney: I have operated according to the method recommended by Dr. Green several times, and with a great deal of success.

Dr. W. Cheatham: I would like to ask Dr. Ray if he considers the operation described original.

Dr. Ray: I can find no reference to exactly this method. There is an operation called Dianoux's, in which the skin flap is left attached at both ends, and the flap containing the lashes dissected up and the two transposed.

Dr. A. M. Vance: I think a piece of skin taken from under the wing of a chicken would possibly be better for this purpose than skin from the human.

Dr. Ray: The prepuce from a recent cir-
cumcision has been used. The point that I wished particularly to make in the paper was the transformation of skin into mucous membrane. I think after you transfer the skin into the surface of the mucous membrane, if you leave it attached by its base it remains skin, but if you cut the base as soon as there is evidence of life in the flap and it has become thoroughly adhered, it will be as an island of skin in the center of mucous membrane, and that transformation will rapidly take place.

Dr. W. C. Dugan: Several members present will remember I reported at the last meeting a case that was operated on at the Norton Infirmary, in which the gall bladder had burst and numerous calculi were found. I will state that the patient is steadily improving, has no fever, pulse and temperature normal. Was able to sit up to-day.

Dr. Palmer: I will mention a case that is of interest to all who are concerned in life insurance examinations. The patient is a young man, twenty-four years of age, with an unimpeachable family and personal history, with one exception. I saw the case only secondarily, Dr. Grant having made the primary examination, and did not obtain the name of the doctor or doctors who had observed the man. In his walk he handles his left limb clumsily, and gives this history: When he was seven years of age, seventeen years ago, he was struck on the head by some falling body, and, although he manifested no head symptoms at the time, it was noticed some days afterward that he had defective use of his left limb. His left leg at the calf measures now thirteen inches, against the right calf fourteen inches, the left thigh being proportionately smaller than the right thigh, with excessive knee-jerk on the left side. All the standard tests for faulty co-ordination resulted negatively, with the exception of this excessive patella reflex. He had never had any other disease. He is city buyer for a wholesale grocery house, spends half of each day on the street, and does not use a cane; can run up and down stairs rapidly without using the banister. The case is one of double interest; first, as regards the question of his insurability, which hinges wholly upon the remote possibility of his developing epileptiform or other cerebro-symptoms, all of which he has so far escaped. I may state that I recommended him for a short term policy, putting him on the third class of risks. The second point of interest is, that the case demonstrates in the human being the localization of function in the cerebrum, as shown by Ferrier, Gowers, and others, by experiments upon dogs. There is in this case a faint linear depression extending from below backwards, just to the right of the median line and central over the fissures of Rolando. As is known, the gyri that border on this fissure on either side are centers of motion for the hind leg of the dog, as has been repeatedly demonstrated in the experiments above referred to. I do not know of any recorded case of exactly similar character to this one, in which now, after seventeen years, the only results that have been manifested due to this injury are the disturbances in the movements of his left leg. Its difference in size, as compared with the other limb (and there is also some shortening), is evidently due to temporary arrest of growth in the years immediately following the injury, as the limb now, other than its being undersize, is perfect in all its developments.

Dr. A. M. Cartledge: I think, in justice to this man, he should be classed second rate, at least for insurance.

Dr. Cartledge: I simply have a case of fracture to report that I saw a week ago, and which presents many interesting features. I was called one week ago to morrow to see a man who had been injured by being thrown from his wagon; he did not know whether the wagon passed over him, or exactly how the injury was received, but he had a compound fracture of both bones of the right forearm. There was severe hemorrhage, and the physician who was called at the time controlled this by applying a bandage tightly. I saw him about two hours afterward, and owing to the swelling and hemorrhage I suspected laceration of the radial artery, as the wound was just over the course of the artery. I unwrapped the bandage, found it thoroughly saturated. I made an incision over the wound, and found the radial artery was partially cut in two. This vessel was ligated, attempts at reduction of the
fracture instituted, and an extension brought out the fact that the ulnar fracture could not be asposed by reason of a detached spicula of bone, some two and one half inches in length, which had become wedged transversely between the two fragments. Perforation of the skin seemed imminent from this detached piece of bone. An incision was made over the ulnar side and the loose fragments of bone removed. Thorough drainage was practiced from one fracture to the other, and the arm put up in antiseptic dressing, and over all a plaster of Paris bandage. The dressing was removed on the third day in order to remove the drainage, and a new dressing applied. The case has acted in all respects like a simple fracture, the temperature never getting above 100°. This case, an instance of the worst form of injury, beautifully illustrates the wonders of asepsis and antiseptics in surgery.

Dr. Wm. Bailey: I would like to ask the doctor what he found the dressing saturated with.

Dr. Cartledge: With blood and serum.

Dr. W. O. Roberts: One week ago last Sunday I was called to see an old lady, a very fleshy woman, who had umbilical hernia, which gave her a great deal of pain and discomfort. The hernia had been operated upon twice before with no radical cure. Each time, she told me, it remained well for about a year. When I saw her the hernia was about the size of a hen's egg and very tender. In cutting it down upon it I found the peritoneum and transverse colon adhered. Just as I detached it she had a violent spell of vomiting, and, naturally, a lot of the intestines came out through the opening. I washed them thoroughly, replaced them through the opening, the wound was closed up and sutured. She has gotten along without any untoward symptoms, and perfect union took place. The peculiar feature in this case is not so much the hernia, as the fact that about four years before his death (which, I believe, was in 1882) Dr. Cummins removed a tumor from her breast. A year before Dr. Cowling's death he removed another from the same breast. A year after that I removed one from the other breast, and there has never been any recurrence of the tumor I removed. Upon examination I found the tumor to be scirrhous.

Dr. Cartledge: How old did you say the patient was?

Dr. Roberts: Seventy-six.

Dr. D. T. Smith: I would like to report a case of skin disease, in which I was not able to make a satisfactory diagnosis. A woman was taken with severe pain in the stomach which lasted about twelve hours, at least it was annoying for that length of time, and then an eruption came out on the face and over the external aspect of the arm, which in itself looked like eczema or erythema. There was considerable itching and burning, and at the same time she had some neuralgic pains. I gave her some oxide of zinc ointment to apply, but after a while she left off the application I had given her and used simply vaseline. In about five days the eruption was almost completely gone, and there has been no recurrence. I do not think it was eczema or hives, possibly it might have been some form of erythema.

Dr. Palmer: I think it is without question a case of erythema multiforma.

T. S. Bullock, M.D.,
Secretary.

CLINICAL SOCIETY OF LOUISVILLE.

Stated Meeting, March 22, 1892, the President, Dr. Gunternann, in the chair.

Dr. L. S. McMurtry: Mr. President, I will report a case of pelvic peritonitis, which presents some exceptional and instructive points. A young unmarried lady, twenty-one years of age, robust and well developed, suffered two years since a posterior dislocation of the uterus, accompanied with dysmenorrhea. She was treated very aggressively by the attending physician. Forcible efforts of the sound, and later forcible dilatation under chloroform and a stem pessary were resorted to for replacing the uterus and relieving dysmenorrhea. She had a violent attack of pelvic inflammation after this, and was lame from that time. She could not straighten out the left leg, could not lie on the left side, could not walk erect, and suffered with tenderness on the left side of the lower abdomen. The menstrual periods were accompanied with intense pain for four days; she
had cold hands and feet constantly, with reflex pain and focal disturbance of vision, which could not be permanently cured by glasses. Pelvic examination by the bimanual method disclosed the uterus flexed sharply upon its neck with the fundus fixed by adhesions in Douglas' space. The left ovary was prolapsed and tender, and firmly attached between the body of the uterus and the bowel. After repeated examination I did an abdominal section, separated adhesions and liberated the uterus and ovary from their attachments, and restored normal relations. The ovaries and tubes gave no evidence of structural lesions, and of course were not removed. As soon as she came out from the anesthetic she discovered that she could extend her left leg without pain or discomfort, and called the nurse's attention to this fact. Her hands and feet have been warm since the operation, and she is quite free from pelvic pain. Her convalescence is now advanced, and has been uneventful as to complications or any trouble whatever. Indeed, she has not required an anodyne, and has had normal pulse and temperature throughout. The trouble in her case was mechanical. Flexed uterus with consequent engorgement and dysmenorrhea; a fixed and adherent ovary subjected to constant pressure, producing pain and reflex troubles. The treatment was directed to liberation and restoration of the organs involved, with immediate results. The case is one of many illustrations of the lesions which may result from misapplication of the so-called minor gynecological operations.

Dr. J. M. Mathews: Do you include the pessary as a factor in producing that condition?

Dr. McMurtry: She had a stem pessary introduced. I think this is a very dangerous instrument. She wore it for about six or seven days—as long as she could.

Dr. J. G. Cecil: If I catch the drift of Dr. McMurtry's remarks, he attributes the condition of this young lady to the treatment which she had received, and I believe he is correct. He, as well as every other man who does any thing in gynecological work, will recognize the extreme liability of any intra-uterine manipulation to cause extension of inflammation to surrounding tissues, to the fallopian tubes or ovaries, possibly, and putting the uterus in much worse condition than it would have been in if left alone absolutely. I would say that this woman would have been much better off if she had never been treated with a stem pessary; if the cervix had never been dilated; or, in other words, if the uterine cavity had been held sacred. I believe that Dr. McMurtry's treatment of this case, as he found it, was the only thing that could have promised any relief.

Dr. F. C. Simpson: This only goes to show how often the specialists come in contact with cases that have been meddled with by the general practitioner who knows so little about treating these diseases. I suppose the specialists come in contact every day with treatment that has been decidedly disastrous to the patient. I hope the time is coming when the general practitioner will let such cases alone and turn them over to the specialist.

Dr. I. N. Bloom: I would like to ask Dr. McMurtry if this woman had applied to him in the beginning, before she had been meddled with by others, would he have advised the operation?

Dr. L. S. McMurtry: No. I would have endeavored to restore the womb to its proper position by simple elevation and support. The criticism I would make on the other treatment is, that it was so very aggressive, I think it is certain that the traumatism caused by instruments was the means of establishing infection. The attack of peritonitis did not occur until after several operations were done, and after the introduction of the stem pessary. The uterus and uterine appendages are mobile organs, and up to the time the infection occurred they were still movable. Now, after the acute attack of pelvic peritonitis, the uterus was no longer a movable organ, but had become fixed in Douglas' space, and the ovary was imprisoned underneath the body of the uterus.

Dr. T. Satterwhite: I would like to ask how Dr. McMurtry would treat a case of retroversion which was not virgin.

Dr. McMurtry: I will state, in reply to Dr. Satterwhite's question, that the most common cause of downward displacement of the uterus in women who have borne children is the absence of the perineum. If the perineum has
been torn away, of course there will be nothing to retain the womb after being replaced in position; but if the perineum is intact and the womb is reduced to its proper position it can be maintained by the aid of a simple pessary.

Dr. W. C. Dugan: In regard to the ovaries, where you deem it necessary, how do you restore those organs to position.

Dr. L. S. McMurtry: They will go back in position. If the body of the uterus has gone over backward, it of course carries the appendages over with it, and if the uterus be replaced in position, owing to the smooth surface covering the organs, they will go back with it. If fixed by organized adhesion, abdominal section will be necessary to restore them to position.

Dr. J. G. Cecil: I would like to ask Dr. McMurtry his experience or his position concerning the method of treatment in such cases as he has related, which is, I believe, called "massage uteri;" what can be done by forcible manipulation without operation? What is the value of that procedure?

Dr. L. S. McMurtry: I have had no personal experience in that treatment at all. I think it is safer and much more satisfactory to open the abdomen and separate these adhesions than to attempt to do so by forcible manipulation. I believe that the operation in the case I have reported would have been complicated fifty per cent by the delay of a year. When adhesions become strong and firm, in separating them there is great danger of tearing into adjacent viscera. When the exudate becomes organized there is danger in separating these adhesions with the abdomen open; and I believe there is greater danger in attempting to break up these adhesions by forcible manipulation without abdominal section. In the former instance force can be applied directly and with appreciation; in the other severe injury may be done without knowledge or opportunity to repair it.

Dr. J. G. Cecil: Do you think it could be done practically by daily manipulation?

Dr. L. S. McMurtry: I do not.

The essay was read by Dr. J. G. Cecil; subject, Occipito-Posterior Positions. (See p. 259.)

Dr. J. M. Krim: Were the membranes ruptured in both cases?

Dr. J. G. Cecil: Yes.

Dr. J. M. Krim: I think failure of rotation is sometimes due to early rupture of the membranes. I would say, concerning the use of the vectis in producing rotation, that I have used it with success in one case.

Dr. W. C. Dugan: I have a specimen that I desire to present. It is a stone that I removed from the bladder by median cystotomy on the 22d of last month, the man having a history of prostatitis, or abscess of the prostate. The man could hardly walk, the pain being very severe. I was asked to see him by the attending physician for abscess of the prostate. I examined his prostate through the rectum, and found it very painful, very hot, and much swollen, the very condition of things we would expect with abscess of that organ. He suffered so much pain that I did not examine him thoroughly until he was put under the influence of chloroform, being convinced that he had abscess of the prostate. I do not know why I went into the bladder before opening the prostate, but I did so, and, passing my finger into the bladder, found this stone, which was removed without any difficulty. I did not cut the prostate, and the point I want to make is that you can remove a stone much larger than this without even nicking the prostate. I do not think it advisable to cut the prostate; if you find a stone too large to be removed, it should either be crushed and removed in pieces through the perineal wound, or else you should go above and remove through a supra-pubic incision.

In this case I gave the patient boric acid, and he was kept in bed. On the sixth day I called to see him, and he met me at the door; said he suffered no pain after the operation at all. I saw him again on the tenth day, and on the seventeenth day he called at my office to tell me that the wound had entirely healed. I will further state that the patient had been examined several times for stone, but no indications of stone were found. Size of stone: long diameter, 1 1/2 inches; short, 3/4 inch; longest circumference, 3 3/4 inches; shortest, 2 1/2 inches.

Dr. I. N. Bloom: I am particularly anxious to speak of this case to illustrate a point, that is, the mistake we make in either accepting a
diagnosis, or yielding to the fear of causing the patient severe pain in making an examination with instruments, thereby possibly overlooking stone.

A gentleman from Indiana had been treated by physicians who were as competent as can be found anywhere, and they had accepted a diagnosis of cystitis. He came to me about two years ago. I insisted upon an examination, and he said he would not be examined by an instrument; that he had been examined already once or twice, and the pain was so excessive that he would not again submit to it. I suggested that he be etherized. He was urinating every half hour, bloody urine loaded with pus; pain excessive. Before leaving my office he had consented to a very careful sounding. I told him I was almost sure that I detected a stone, but would not be positive until I examined him again. My examination did not cause him as much pain as he had anticipated, and he readily consented. In about a week or so I examined him again, and told him very positively that he had stone in the bladder. A few weeks afterward he was operated upon by litholapaxy, and a large sized stone removed. In another case, seen with Dr. Satterwhite and Dr. Brandeis, the diagnosis of another physician had been accepted, and the patient was treated for chronic uncomplicated cystitis. We operated on this patient also by litholapaxy and removed over seventy grains of calculus. It is very easy to accept a diagnosis, or yield to the wishes of patients. I think that chronic cases of cystitis which do not yield readily to treatment ought to be operated upon every time. In the case reported by Dr. Dugan it seems to have been an accident that the stone was discovered. I think, in removing a large stone by the perineal operation, you will have to cut the prostate.

Dr. W. C. Dugan: At the time this patient was put upon the table he told me about having passed a small calculus several years ago. I thought then that possibly we had a stone to deal with in addition to the prostatic abscess. The doctor had sounded him a number of times, and in explanation of why the clink was not discovered I will state that this stone was covered with a large amount of mucus.

It is a very easy matter, sometimes, to overlook stone, as in this case; but I had made no examination of his bladder. I believe that all cases of cystitis, which yield not kindly to the ordinary measures, should be relieved by cystotomy. So it makes really but little difference whether you have made a diagnosis of stone or not, if there is much inflammation of the bladder, since cystotomy is the most certain of all methods of treatment for cystitis.

It is best in children, and adults too, if the bladder is at all intolerant to instruments, to anesthetize the patient. Occasionally even then a stone may escape the sound, but, as a rule, it can be located. It is here that the cystoscope has a great future, for by it I feel sure that stone could not evade detection. But, after all, if the symptoms persist, even after the most thorough examination, I make it a rule to open the bladder, and if stone is found remove it; if not, I secure drainage and cure my patient of his cystitis, which has persisted after long treatment. This is, in my judgment, too often neglected.

Dr. George W. Griffiths: This recalls to my mind a case I saw years ago in the clinic of the Jefferson Medical College at Philadelphia. Dr. Gross had made a diagnosis of stone, and sounded the patient, but no stone could be found. He was very much annoyed over the matter, and said: "Gentlemen, the stone is there, and I will swear to it."

The patient died about a week afterward in the hospital; a post-mortem was made, and the doctor found the stone—it was evacuated.

L. S. M'Murtry, M. D.,
Secretary.

LOUISVILLE SURGICAL SOCIETY.

Stated Meeting, March 14, 1892, Dr. E. R. Palmer, President, in the chair.

Dr. W. O. Roberts: This young man (presenting case in person) two years ago, on the day of the cyclone, March 27th, while hunting in Indiana, fell; his gun, which was loaded with bird-shot, was discharged and he was shot in the arm between the elbow and shoulder. I saw him four days after receipt of the injury; the arm was enormously swollen, temperature 102°, pulse 120. I extracted, it seemed to me,
about a handful of bird-shot. Some weeks afterward there seemed to be some matter in the arm and I cut it open. After the healing of the wounds he had almost totally lost the use of his whole arm, could not use the elbow, all the fingers were perfectly stiff, and pronation and supination lost. I sent the patient to Dr. Cottell.

Dr. H. A. Cottell: When this patient came to me the principal trouble was in the posterior muscles of the forearm, which showed signs of atrophic paralysis. The muscles above the elbow were paretic. The muscles supplied by the musculo-spiral nerve were the only ones that showed much paralysis. It looked as if the arm would be permanently crippled. I did not expect much from treatment; I found, however, that the muscles above the elbow soon began to respond. The treatment was galvanism (30 to 50 milliamperes). After continuing this treatment for six or eight mouths, I saw the skrunken muscles regaining form. The atrophy had ceased, and they were filling out. In a few months more they began to respond to faradism. There is now no permanent atrophy except in one of the muscles of the thumb—the abductor pollicis.

Dr. A. M. Vance: What effect did the time have on the case?

Dr. Cottell: I think time was an important factor.

Dr. W. C. Dugan: How deep did the shot go in?

Dr. Roberts: Through the skin, fascia, and muscles.

Dr. Vance: I have had two cases like this; one some years ago, who was shot in the axilla, and he had paralysis of the muscles supplied by the ulnar nerve. I have a case under observation now who was shot very much as this man was. I removed a good many shot and considerable clothing from his arm. I am using only hot water with him. Have not seen him for a month, but at that time there was a great deal of improvement over what there was at first. He complains a good deal of a burning sensation in his hand. The wound was about the same as in this case, shot being bunched in places rather than having gone in separately. I believe that the treatment as used in this case is the proper thing, but sometimes more good is attributed to electricity than is due.

Dr. E. R. Palmer: I want to say a word or two concerning the restoration of nerve power in injured nerves. It is said that the ulnar nerve has some 8,000 fibers in it, and if you cut it across and bring the ends together 4,000 of these fibers are sensory and 4,000 are motor; now we can not expect or hope to get 4,000 feeling and 4,000 working nerves to so approach each other as to reunite and restore perfect function where you suture the nerve. I think the pathology of the nervous system shows that if a nerve is cut you have atrophy beyond the point of injury. In reuniting the ends the neuroglia or connective tissue of the distal portion furnishes a sort of framework work into which the ends of the nerves may build new nerves, and that they build out from the proximal end into the tissues and form new nerve filaments. This results in a gradual restoration of the nerve power because of the growth from the proximal stem of the new nerve filaments. I think the local stimulation of electricity will do much toward the restoration of nerve function by stimulating growth, and that a cut nerve will build out new filaments into the tissues if you will only help it.

Dr. Dugan: The latest thing that has been written upon this subject, I can not recall the author, reports several of these cases, in one of which the nerve was reunited within one week's time, and the patient had complete restoration of the entire nerve power. This would show that there must be something else besides the proximal growth. One case is reported as reuniting in four days after the suture of the nerve.

Dr. Palmer: With 8,000 fibers in a nerve that is not larger than a julep-straw, you can not hope to put all the ends together in exact apposition; but if you get a union restored in four or five days, there must be one of these happy results of suturing the two ends squarely together. The doctrine is that in suture we furnish a framework work with which the proximal ends build out into the tissues new nerves.

Dr. A. M. Cartledge: I have very little faith in the use of electricity. I do not see how in any way it assists in the restoration of a nerve.
I would call attention to this, that it would not be necessary for all the 8,000 fibers of these nerves to get into accurate apposition; probably if a few of them did, it would answer the same purpose. You can make one proximal stem do the work of two. This is advised by Gluck in cases where you can not get the ends together. Of course the upper part of the fibers are entirely cut off and grafted on.

Dr. Palmer: There is no question but the sensory and motor fibers are distinct. They come from different nerve cells, and are different nerves. A motor nerve must communicate with a motor center. If you get a restoration in a few days you would simply happen to hit the "bull's eye," get sensory fibers united with sensory, and motor fibers with motor.

Dr. D. W. Yandell: Concerning the use of faradization, it brings the blood to the part and stimulates nutrition of the nerve; but it seems to me that in the restoration of function in paralyzed muscles time plays a more important part than electricity.

Dr. Cottell: Drs. Vance, Cartledge, and Yandell have stated very properly that we do not know how important a part time played in this case. There is no doubt but it played a very important part. There is, however, one point that they have overlooked. We all know very well that when we have a case of central paralysis the treatment by electricity does very little good. You will find after a time what muscles will regain their power, and what muscles will remain paralyzed, but when you take a case of peripheral paralysis it is a very different thing. If you have a muscle or group of muscles so paralyzed as to undergo atrophy, you must keep up the treatment with galvanism, or you will have permanent atrophy. If you do not keep up the galvanism until nature has a chance to bridge over the gap in the nerve, you will have no restoration of function. If you do keep up the stimulation, you may hope the process of repair so well described by Dr. Palmer will take place, and then you can use faradism or massage with effect. This is a point that I think is often overlooked in the treatment of such cases.

Dr. W. O. Roberts: At the last meeting of this Society I exhibited a case of non-union in fracture of the femur of nearly a year's standing. You will remember my stating that several months ago Dr. Vance and myself attempted to cure it by lapping the ends together. I operated upon the case last Monday, assisted by Drs. Vance, Dugan, Pierce, and Evans, and in cutting down to the bone we found no sign of union whatever. There was considerable separation of the fragments, possibly three inches. We sawed off the fragments and brought them together, it being necessary to take off two pieces from the lower fragment before we could get the proper approximation. (The fragments of bone sawed off were passed around for inspection.) After getting them together in a slanting position, we drilled through each fragment on one side of the bone and tied them with silk-worm gut. The wound was closed, no drainage being used. The man so far has gotten along without a single bad symptom, he has had no fever, the only trouble of which he has complained has been an occasional pain. I saw him yesterday evening, and he was as cheerful and as comfortable as he was before the operation was performed.

Case 2. A woman, forty-three years of age, had been complaining for several years of pain in the inguinal region, and frequently her abdomen would become enormously distended with gas. She had great difficulty, she said, in defecation, and had for some time been using a syringe, the fecal matter coming out in long ribbon-shaped pieces. I made a thorough examination, and found what I took to be a displacement of both ovaries, with retroverted uterus. I advised removal of the ovaries, and did a laparotomy for that purpose. Found one ovary very much enlarged; it had undergone cystic degeneration. The other was also cystic, and I found it very much indurated. What I took to be the other ovary, however, behind the uterus, was a pedunculated fibroid, which was ligated and cut off. It was the pressure of this fibroid and enlarged ovary that gave rise to the rectal symptoms. She made a complete recovery, and the bowel trouble has entirely disappeared. (The small tumor was opened, and pronounced by all to be a dermoid cyst.)

Case 3. A gentleman, about twenty-two
years old, was sent to me by a physician in Owensboro, and upon examination I found he had only one testicle in the scrotum, which was the right one. When he appeared at my office there was quite a swelling in the groin. He said he was a letter carrier and frequently had to give up his work on account of the pain. I sent him to the Norton Infirmary, and went the next day to operate upon him. He was put on the table, and before chloroform was given I searched for the testicle and could not find it, neither could I find swelling in the region where it had appeared the day before. As I could not find the testicle, I did not think it altogether safe to cut in. He said: "Doctor, I can get that out for you very easily by walking a great deal, or by having connection with a woman." Two days afterward I went out with Drs. Vance, Pierce, and Henser, and it was decided to cut down and search for the testicle, of course, if found, to remove it. Chloroform was administered, an incision made, and we could just see the end of the testicle showing at the external ring. I secured it with forceps and could just get the entire testicle out of the external ring; it was perfectly flat. The patient has gotten along without any untoward symptoms.

Case 4. A young man was sent to me by Dr. Tobin from Franklin, some time ago, having an enlargement of one side of the scrotum. I pricked it, and drew off about six ounces of straw-colored fluid. Upon removal of the fluid I found quite an enlargement of the testicle, which he said had been troubling him for about eight months. He never had any injury that he knew of, and the growth had never given him any considerable pain. He came back in six weeks, and I drew off four ounces of fluid; there was still this enlargement of the testicle, very little change having taken place; if any thing, it had gotten a little larger. In four weeks he returned again, and I drew off about three ounces of fluid. Now, the fourth time, he came back for the testicle to be removed, which operation I performed last Friday. From the history of the case, the general history of the family, etc., I think it most likely is a case of tubercular testicle, and that is the diagnosis we made. No examination has yet been made of it. However, there is this point, there was no induration about the epididymis that you would expect to find in tubercular testicle.

Case 5. The next case is a thumb that I recently removed, it being a secondary operation. The primary one was done for a tumor on the phalanges of the first joint. The woman came to me, and I took the trouble to be sure it was sarcoma and removed the entire thumb and a portion of the metacarpal bone.

Case 6. This is simply a very large tumor with two cysts. When removed the tumor and contents weighed about sixty pounds; the patient was about sixty-three years old; had been tapped two or three times. There was a slight adhesion in the region of the points where tapping had been done, and there were very strong adhesions of the tumor to the transverse colon. The patient had gotten along without any bad symptoms. I simply report the case on account of the woman being so very old and in feeble health. This makes the sixth case that I have operated upon for large ovarian tumors in elderly people—people over sixty years of age. They have all gotten well without any untoward symptoms, doing, seemingly, just as well as younger subjects.

Dr. E. R. Palmer: Dr. Turner Anderson called me over to his office to determine what should be done with a man fifty-four years of age with an enormous scrotum and invisible penis. He said that he had explored the right testicle with the trocar and drew off a little cheesy matter. We removed the testicle three weeks ago last Sunday. Dr. Howard has carefully examined it, and finds nothing of value upon which to base a diagnosis. On the opposite side, that is, the left side, just opposite the anterior spine of ilium, was an abdominal scar. We asked him what that meant, and he said that when he was a boy in Germany he had an abscess there which was opened three or four times, and he finally got well; the doctors said they did not know what it was. He gave us no history pointing to syphilis. He is most too old for tubercular testicle, and, as far as I could find, it was not sarcocele. I am unable to say just what was the cause of the condition of the testicle. On the opposite side he had a hydrocele, which we tapped. My assistant wanted to open this sac, but I told him we wanted to
have it opened here. (The sac was cut open and pronounced by all present an old hydrocele. The testicle was found in the wall of the sac; it was in extreme atrophy with no trace of epididymis remaining.)

One very interesting point about the case was that the man lost hardly two drams of blood, and that came from the scrotal skin. The vessels of the cord were empty and extremely contracted.

Dr. E. R. Palmer: I will read you from my notes on the back of this photograph the history of the case presented. "In October, 1891, got in a fight with a tramp down at Earlington; struck him in the mouth with my fist; hand was sore for a time, but got well; and about three weeks afterward a friend in shaking hands hurt the place and this sore followed." (A large, indurated, oval sore over the posterior surface of the fourth and fifth metacarpal bones.) Examination of body showed a few fading macular syphilitides over abdomen, and a faint corona veneris with considerable adenitis at various points.

The President: The first specimen for discussion is the case of the young man operated upon for non-union fracture. Dr. Yandell advised against the operation.

Dr. A. M. Cartledge: Why was silk-worm gut used.

Dr. W. O. Roberts: We were a little afraid of wire, afraid that we would not get it perfectly aseptic; and it would be more apt to break than the silk-worm gut. We thought the silk-worm gut stronger than catgut. In the use of wire it sometimes becomes necessary to cut down and remove it, and frequently the wire breaks.

Dr. A. M. Vance: I have seen this case two or three times with Dr. Roberts. Am inclined to think that in the majority of cases the cause of non-union fractures in patients of this age is some constitutional disease. I believe that to be the case in this instance. I think silk-worm gut is better for this purpose than either wire or catgut. If you use wire, and bring it tight enough to get the proper approximation, three out of five times it will break.

The President: The next is the case presented by Dr. Palmer.

Dr. A. M. Cartledge: I think in the case of old hydrocele you did the very best thing that could have been done.

Dr. Turner Anderson: I referred this case to Dr. Palmer. The tumor was as large as a cocoanut, and the source of great discomfort. I pricked it with a hypodermic syringe, and drew off small quantity of what I took to be hydrocele fluid. Afterward tried to tap, but found fluid too thick to flow through any trocar. Suspected tubercular disease, and advised operation.

Dr. A. M. Vance: I take it that this was a case of hydrocele. It is not an uncommon thing to have that milky material in old cases. I operated upon one yesterday where all the fluid was opaque. I think the treatment given was the correct thing.

Dr. Roberts: I would like to ask if the nature of it had been understood at the time, and the man younger, would it have been proper to have removed the mass as was done.

Dr. Palmer: This was a very chronic case in an old man. All the evidence of penis he had was simply a wrinkled foreskin. Could not see the organ at all. The tunica vaginalis was entirely adherent to the scrotum, and its separation from the testicle was simply impossible. I do not believe that a young man could have had the condition that this old man had. The testicle and tunica vaginalis had simply grown together.

Dr. Cartledge: These cases are very numerous in the aged. Now, the question arises, how far are we justified in exploring the testicle and tunica vaginalis for the purpose of diagnosis. I will refer to a case I had last summer, which was reported to another Society. It was a question of diagnosis, a double sarocele both sides. I laid the matter before the man; told him that I did not like to sacrifice his testicles. After preparing the scrotum I made an incision the full length of the scrotum and took the testicles out; an examination was quickly made, and it was found to be tubercular trouble. I removed both testicles, and the man recovered in eight or ten days. Now what, in connection with this case, it seems to me, has an interesting bearing is how far we are justifiable in examining into the condition.
Dr. Palmer: No man could have separated the testicle from the other structure in this case. A very interesting point in connection with Dr. Roberts's case is, what is the effect on a man when you remove one of his testicles. I believe that a man with one good testicle is just as good as though he had three.

Dr. I. N. Bloom: I had a patient sent to me who was just entering the age of puberty. The testicle on the left side could simply be felt through the external ring. The question I want to ask is, what should be done; should I advise the parent in this case that the boy be operated upon for this cryptorchid condition, or allow it to go on as it is.

Dr. Roberts: I should let it go on.

Dr. Vance: I think I saw this case. Ordinarily you can get the testicles into the scrotum. When it is evident that this can not be done, then I think it is proper to remove them. I doubt the propriety of waiting any length of time.

Dr. W. C. Dugan: There is another question, when you can not bring them down, how to put them back into the abdomen, closing up the ring completely. The reason that these testicles have no function is that they become more or less diseased.

The President: The next case is chancre of the hand.

Dr. Bloom: I saw the case one hour after Dr. Palmer. The patient stated that the doctor had seen an outbreak on his body. I examined him very carefully, but found no outbreak at all. Thinking that perhaps the light in my office was not as good as it should be, I took him out of doors, but could see nothing. I examined the glandular system and found an enlargement at the elbow-joint, and an enlargement of the axillary glands, but could find no other enlarged glands. I examined the glands in the neck and could discern no enlargement. He stated that after the hand-shake some powder like burned alum had been applied to the sore, and his condition had gone on from bad to worse until the 24th day of February, on which date the wound presented just the appearance that is shown in the photograph. He said the physician who had been treating him said it was not syphilis. I put him on iodoform treatment, and from the time he began its use he improved. The indurated glands have disappeared entirely, and altogether he feels all right. I do not think it is a case of syphilis, but an ulcer which has been irritated by treatment until it has reached this size. There were two little openings the first time I saw it. I will state that in two weeks the healing was so marvelous that it will strengthen me in my diagnosis that it is not syphilis. Also the absence of indurated glands on the body. After the doctor had seen the outbreak, I could see none. The patient has never been put on specific treatment.

Dr. Palmer: The man came to my office and said, "Doctor, I have something that I want you to examine; I do not want any treatment, nor any medicine, just want your opinion of the case. I am under Dr. Meriwether's treatment." I told him to take off the dressing and let me see what he had. I examined it, and he wanted to save the dressing Dr. Meriwether had put on, so that Dr. M. would think no one had touched it since he dressed it. I told him to go back to Dr. Meriwether and tell him that he had been to see me, that I had put the dressing on. When he asked me my charge, I told him to go with my young man and have a photograph taken of his hand. That was the first and last time I saw him; I told him to go back to Dr. Meriwether and continue his treatment. Though seeing him but once, I made the diagnosis of syphilis. I think I saw him at about that period common to syphilis when early secondary symptoms have faded out, the second incubation period.

Dr. Vance: This man appeared at my office to get me to look at his hand. I did not examine him otherwise at all. I asked him for his story, which is about as you have heard. I told him from the appearance I thought it was chancre. One point has not been brought out, and that is, he told me that the sore had never healed up completely. It had the appearance to me of a typical chancre.

Dr. Roberts: This man appeared at my clinic at the University. I made an examination of his hand, and stated to the class that it was possibly chancre, or might be the result of some deep-seated injury; that I would not like
to give my positive judgment upon it until I had made more thorough examination. I wanted to probe it to see if there was any disease of the bone or joint. He did not want this done, and I would not give any further opinion. The induration about the hand seemed to be right upon the edge. I made no examination of his person to see whether there was any eruption, but dismissed him because he would not allow me to examine him as carefully as I wanted to.

Dr. Vance: I believe that I can exclude any deep-seated trouble. There was no evidence of bone disease at all. If it has healed up, there is no deep-seated trouble.

JOHN G. CECIL, M.D.,
Secretary.

Reviews and Bibliography.


With this work doubtless closes the life task, so far as medical science is concerned, of this distinguished author. His labors in the field of medicine have been very great, and his rewards have been valuable and many, and it is with sincere sympathy that a circle covering widely distant lands has learned that it is the dreaded asylum that furnishes him a grave while yet the vital spark remains.

Admiring his industry, his ambition, his wide range of information, the reviewer would, perhaps, be found in a small minority in the estimate of this and most of the other works of Roberts Bartholow. We object to him that in medicine he walked by faith. It seems to us that he regarded medicines as curative to an extent and to a degree that finds no warrant in reason or critical experience.

He was ready to listen with an ear all too attentive to testimonials of success from almost any source, however that testimony might have appeared in the light of common experience and observation. We have had all too much of the practice of having published only successes, so that the whole world is left to try and ascertain individually that any given therapeutic measure is a failure.

Of the work in hand it may be said that, in addition to the faults named, it is bulky beyond all reasonable measure. Only a few medicaments differ in their action when given hypodermically and by the ordinary methods. With most of them there is a difference only in the dose required. It is these features alone that one would think ought to be dealt with in a work of this character. In works on materia medica and therapeutics the properties and physiological action of the several medicaments are given at length, and if these matters are to be repeated in works treating of every separate form of administration, there is no end to the number and size of the books that might be written.

Among particular features to be pointed out for disapproval is the recommendation of iron hypodermically for arsenic poisoning, atropine for morphine, and even a grave consideration of Brown-Séquard’s elixir. There may be and are doubtless many who will differ with the reviewer in the estimate of the work, but for ourselves we regard it as suitable only for the author who looks merely for suggestions, while for the beginner it could be only confusing and misleading.

As to the term hypodermatic used by the author, while it may be more regularly formed than hypodermic, the greater shortness of the latter is justly leading to its general adoption.

D. T. S.

The Diseases of the Mouth in Children (Non-Surgical.) By F. FORCHHEIMER, M. D., Professor of Physiology and Clinical Diseases of Children, Medical College of Ohio. 199 pp. Philadelphia: J. B. Lippincott Company. 1892.

The contents of this monograph were first published in a series of articles in the Archives of Pediatrics, and the author has shown much industry in the collection of materials. Indeed, much has been collected of a character that the average reader will hardly appreciate.

The time has passed for lugging in, even in journal articles, all the crude fancies and speculations that the history of medicine supplies us with on every subject that can come up. These
things are largely dead and buried, and few
desire to open their graves.

We think the author aims to tell us in his
preface that his design is to improve the no-
mencature of diseases of the mouth, and to
aid in clearing up the confusion prevalent in
English pediatric literature.

We do not see, however, any changes made
in nomenclature, except to reverse the Latin
names already common among the Germans
and not new among us. And as to clearing up
confusion, we fail to see wherein the author has
succeeded in his purpose.

In the discussion of the several themes he
has introduced a goodly amount of confusion,
and has a way of not coming to what he has
to say, and not quitting when he has done,
that is decidedly trying on the patience; nor is
the style of his English commendable for its
purity.

D. T. S.

A Practical Treatise on the Diseases of Women.
By T. Gaillard Thomas, M. D., LL. D. Sixth
edition, enlarged, and thoroughly revised by Paul
F. Mundé, M. D., Professor of Gynecology at
the New York Polytechnic and at Dartmouth College.
Containing three hundred and forty-seven engrav-
ings on wood. 826 pp. Philadelphia: Lea Brothers
& Company. 1891.

For five editions the text-book by T. Gaillard
Thomas on diseases of women was regarded with pride by all Americans as the best work
of its kind in any language. But perpetual
youth is not vouchsafed to the great any more
than to the small, and so in the rapid progress
of gynecology the old favorite began to be lost
sight of. It had, however, too many features
of perennial freshness and excellence to be en-
tirely thrown aside. So it has been taken up
by one who is the peer of any as a practitioner,
and withal a very creditable writer, and re-
vised to the standard of present progress.

Dr. Mundé and Dr. Thomas have labored
together in this improvement, and wherever
the statement of individual experience or differ-
ing opinions needed to be made, it has been done
over their own signatures and included in
brackets. The reader has thus the most mature
views of two eminent authorities. Withal, per-
haps, it has not reached in many respects the
standard of some recent works, but it is and
must always remain a monument of great
learning, experience, and truthfulness, and a
model of teaching style.

D. T. S.

The Comparative Anatomy of the Domesticated
Animals. By A. Chauveau, M. D., Member of
the Institute (Academy of Sciences), Inspector
General of Veterinary Schools in France; Professor
at the Museum of Natural History, Paris. Revised
and enlarged. With the co-operation of S. As-
loing, Director of the Lyons Veterinary School,
Second English translation. Translated and edited
by George Fleming, C. B., LL. D., F. R. C. V. S.,
late Principal Veterinary Surgeon of the British
army. With fifty-five illustrations. 1084 pp. New
York: D. Appleton & Co. 1891.

Of those who have devoted their powers to
the study of the anatomy and physiology of the
lower animals, especially of the domestic ani-
imals, Chauveau stands pre-eminent. In every
appeal he is the last authority. This is the
monumental work of his untiring industry, his
great ability and profound learning.

Here the student will learn all of value that
is known of the anatomy of the domestic ani-
imals, and will find especial help if he desires
to learn the meaning of rudiments and rever-
sions in the human body; for this purpose,
however, it is not complete. In its line it is
beyond praise.

D. T. S.

International Clinics: A Quarterly of Clinical
Lectures on Medicine, Surgery, Gynecology, Pedi-
atrics, Dermatology, Laryngology, Ophthalmology,
and Otoology. By professors and lecturers in the
leading colleges of the United States, Great Britain,
and Canada. Edited by John M. Keating, M. D.,
Philadelphia, J. P. Crozier Griffith, M. D., Phil-
adelphia, J. Mitchell Bruce, M. D., London, and

This work represents the cream of medical
teaching in English speaking countries. Its
great value for consecutive reading appears
when the physician reads each separate lec-
ture in connection with some case occurring in
his practice. It is then to him a perpetual
polyclinic; he is never out of school. To the
lecturer it is also of great value, for the most
original mind can not fail to be aided by the
knowledge of what others have thought and
said on any theme that may be the subject of the lesson in hand. It is a great work, the outcome of a grand conception. D. T. S.


The eighth issue of Bates' Advertiser's Handy Guide is now out, in an enlarged and improved form. It is emphatically the "Advertiser's Handy Guide," as it presents in compact form all information essential to advertisers in selecting the mediums which they may desire to use. Morning, evening, Sunday, and weekly papers and monthly publications, with their real or supposed circulations, and political or other characteristics are stated, all in a sufficiently comprehensive way. The circulation of this volume will prove of great value to the publications listed, and almost invaluable to those enterprising houses who dispense advertising patronage, the busy heads of which have no time to examine with needed care more extensive publications of this nature. It will be mailed to any address on receipt of $2 by the publisher.

Medical Consultation Book, a Pharmacological and Clinical Book of Reference, containing the therapeutics of a full list of the official and non-official articles of the Materia Medica, with a consideration of the Action of Medicine, including an extensive collection of favorite prescriptions from the most reliable authorities of the medical profession. By G. T. Hachenberg, M. D.

This work is designed for the consultation room, and all subjects are so classified as to be of ready access for authenticated treatment of each disease in its different stages and complications.


There is perhaps no branch of medicine, after anatomy, that so taxes the descriptive powers of a writer as diseases of the skin. Description is a gift, and those who describe graphically, impressively, and accurately are "born not made."

To this class do not belong the authors of the work before us. While apparently correct in description as far as it goes, and orthodox in treatment, it is not particularly lucid, and doubtless is more satisfactory to those who take the lectures of the authors with it. D. T. S.


In the author's preface is found the aptest criticism of this work, "It needs to be preceded by or associated with an elementary course in anatomy and physiology," and then it may be added that many points of this kind are too briefly treated to be of any advantage. That it has undertaken too much is the most that can be said against it, otherwise it is a very excellent book. A most commendable feature is a glossary appended, embracing the medical terms used in the work. In our opinion this is indispensable to the full usefulness of a work of the kind.


This work gives a complete account of the main facts in bacteriology; also the life history of the more prominent bacteria and allied organisms. To my mind, too much prominence is given to the discussion of certain questions, while others equally important occupy an extremely small space. There are many original observations in the work, and it will doubtless occupy an important place in the library of the scientific physician.

H. M. Goodman.


This little manual, while not possessing the scope of some of the more pretentious works
the subject.

H. M. GOODMAN.

Abstracts and Selections.

LAPAROTOMY UNDER COCAINE.—There are many times, patients who require abdominal section, yet who are in such physical condition as to almost absolutely prohibit the administration of either chloroform or ether. In such instances the surgeon may without hesitation make the operation under the effects of cocaine.

The following is an instance:

Mr. W., age fifty-two, patient of Dr. F. B. Wheeler, of Sawyer, Kansas, was admitted to All Saints’ Hospital suffering from a cancerous tumor of left side of neck, of very rapid development. Patient began to experience difficulty in swallowing about nine weeks ago, when his weight was 165 pounds. The dysphagia increased at an alarming rate, and two weeks before admission to the hospital it became a matter of impossibility to swallow at all. Partial removal of the tumor was done by Drs. Wheeler and McCoy, of Pratt, Kansas, under local anesthesia, it being deemed inadvisable even at that date to use chloroform or ether. There was very little improvement, so patient was brought to Kansas City to the hospital for further treatment.

When admitted he was in extremis—cadaverous, weight less than eighty pounds, and at the gate of death from starvation. Upon the evening of admission the abdomen was carefully scrubbed and shaved and a pad of moist bichloride gauze applied. At 9 A. M. on the following day, assisted by Drs. J. F. Binnie and T. B. Thrush (Dr. Sawyer standing ready to administer ether if it should be required), I made a gastrectomy under local anesthesia from cocaine. One half dram of a 4-per cent solution was injected in eight places into the subcutaneous areolar tissue along the proposed line of incision. As soon as the analgesic effect was established the usual operation was made, and without any pain or even sense of discomfort on the part of the patient. The only disagreeable symptom was a slight nausea when the left lobe of the liver was turned up to allow the stomach to be drawn up into the wound. The operation lasted twenty-two minutes.

How much longer the operation might have been prolonged without discomfort to the patient is a question of interest. But as a large number of the abdominal operations can be made within twenty minutes, it is not so important as might at first be supposed. Besides the fact that the primary depressant effect of a general anesthetic was avoided by the use of cocaine, there were two other points of much importance in this case, viz., the absence of the vomiting that nearly always follows chloroform or ether, and especially the absence of shock. There was a total absence of any thing like shock, and if this be found to be a general rule an immense gain may be made in sewing up stab or even gunshot wounds of the intestine (as well as in other numerous abdominal operations), by the use of local instead of general anesthesia.—Dr. E. Lamphere, Kansas City, Mo.

SEXUAL PERVERSION.—This subject, naturally revolting, has been neglected by the profession to a very great degree, but the increase in the number of crimes, directly traceable to its influence, which the public press is called upon to record, makes some attention to it almost imperative.

The Mitchell-Ward affair in Memphis has brought this matter in a most forcible light before the public. The suicide of Dr. Breedlove, whose perverted love for another man was unrequited, has also attracted much attention. Such cases of sexual perversion can be quite readily explained, and the laity can understand them, although it is difficult to show them that such cases are not necessarily the results of evil habits, voluntarily entered into and willfully pursued.

If to these the famous case of “Jack the Ripper” be added, and a single category made to contain them, the generalization is too sweeping for the mind unfamiliar with these matters, and untrained in their consideration, to at once grasp.

In the current number of the Medical Mirror, Dr. G. Frank Lydston reviews this subject. Among the instances which he mentions to show the unnatural means necessary to bring into play the sexual functions of certain individuals, is one of a man who carries with him a live chicken when he goes upon his semi-occasional debauches. This chicken is decapitated in the presence of the woman, and then and only then is he capable of performing his sexual functions.

Such an individual is clearly defective, mentally, functionally, if not anatomically. Fortunately in the particular phase of his perversion, no criminal elements enter to obscure the judgment. In the case of Jack the Ripper, however, the awful crime of murder being.
present almost forces a harsh judgment and obscures the idea of an uncontrollable, perverted sexual feeling, as the impulse leading to the killing.

Lydston's classification of sexual perversion is as follows:

I. Congenital and perhaps hereditary sexual perversion.

1. Sexual perversion without defect of structure of sexual organs.
2. Sexual perversion with defect of general structure, for example, hermaphroditism.
3. Sexual perversion with obvious defect of cerebral development, for example, idiocy.
4. Sexual perversion from pregnancy, the menopause, ovarian disease, hysteria, etc.
5. Sexual perversion from acquired cerebral disease, with or without recognized insanity.
6. Sexual perversion (?) from vice.
7. Sexual perversion from overstimulation of the nerves of sexual sensibility, and the receptive sexual centers, incidental to sexual excesses, and masturbation.

The majority of sexual perverts should be regarded with pity rather than disgust; be treated as patients, rather than as outcasts and criminals. In concluding Lydston says: “The practical deduction of all that has been said, is that something of the physiology of the sexual functions should be taught to young persons, at least sufficient to enable them to keep off the rocks and shoals of perverted practices. If no other argument will suffice, some good may be done by impressing them with the fact that any abnormal, or for that matter, normal impression made upon the sexual function before the period of adult life has been reached, is liable to leave a permanent impression upon the sensitive nervous organization, as a consequence of which the normal receptivity and excitability of the sexual centers and nerves of sexual sensibility may be absolutely destroyed.” — Jour- nal American Medical Association.

Nervous Sequel of Influenza.—When a storm has swept across a tract of country, although the bulk of the damage which it has done may be visible at once, there are many of the effects of its violence which do not immediately obtrude themselves. Trees may have been shattered and buildings wrecked, growing crops may have been ruined and live stock destroyed, but its ravages do not stop there. This country has recently been exposed to the full force of a severe epidemic—an epidemic which the obscurity of its origin and the suddenness and severity of its attack have combined to render even more alarming than others with which our acquaintance is greater, we can not say closer. The full force of the epidemic has now, it may be hoped, spent itself. But as the storm leaves behind it trees which are blighted, but not destroyed, so this disease, apparently so trivial, seems not rarely to be succeeded by conditions of nervous exhaustion and depression, to combat which requires all the art and skill which knowledge and experience can suggest. There seems to be little reason to doubt that the poison of influenza has a special influence on the nervous system. Numerous sequel of the disease have been described affecting the nervous system in its various parts, both central and peripheral; and there are not a few who hold strongly the opinion that in all its manifestations, both primary and secondary, it is essentially a nervous disease. But whether this view be correct or not, it will scarcely be questioned that the disease gives rise to symptoms of nervous disturbance, both wide-spread and severe. In estimating the amount and the frequency of such disturbance allowance must of course be made for errors of observation. No doubt there has been too much tendency lately to ascribe morbid conditions of various kinds to a precedent attack of influenza, and this disease, already sufficiently loaded with its own burden, has been made to bear a share of others from which it had a right to claim exemption. Thus a patient may date the commencement of symptoms which now clearly point to cerebral tumor from an attack of influenza, but careful inquiry may elicit the fact that the only evidence of this was an attack of headache and vomiting, probably the first attack of this kind associated with intra-cranial growth. So also, no doubt, with other conditions; but even after making a liberal allowance for such errors on the part of the patient or other observer, a considerable residuum is left in which one is driven to acknowledge an incidence of cause and effect; and if this is true of actual structural change in the nervous system, it is no less true of the serious and alarming conditions of what is known as functional disorder, which may go on to manifest itself in profound mental alteration. The excessive depression and lassitude which follow an attack of influenza are too familiar to require more than a mere mention, and in highly neurotic patients such a condition is often quite sufficient to upset entirely the somewhat unstable mental equilibrium. This was no doubt the case with a poor woman who a few days ago was found sitting on her kitchen floor in front of the fire twanging at a clothesline, which was twisted round her neck. Upstairs her two children, one a boy of two years and the other a baby of six months, were found strangled. Evidence was to the effect that, although previously a healthy woman and living
happily with her husband and family, she had become much depressed after an attack of influenza, and this depression had apparently been succeeded by mental derangement. Many similar cases are on record, and they show the profound effect which the poison of this disease has upon the highest nervous centers.—London Lancet.

**Medical Treatment of Rectal Cancer.**

Nearly a year ago Dujardin-Beaumetz called attention to a plan of handling this disorder, which, in his hands, had given results at least favorably comparable to surgical results.

He regards cancer of the rectum as ordinarily of slow growth, and its dangers to be partly the result of the intestinal obstruction which it produces, partly a poisoning from the absorption of the broken-down tissue of the tumor, and lastly, the mechanical results of its pressure on the ureters. To limit the action of these factors, intestinal antisepsis is at least partially available. By irrigation of the bowel, the region of the tumor is kept clean, as well as the culverted portion of the bowel above it. Stercoremia from retained feces is less liable to occur. For purposes of irrigation, Beaumetz uses a solution of naphthol, about four grains to the quart. Of intestinal antisepsis to be given by way of the mouth, he prefers salol and bismuth. To still further effect this object laxatives are employed for the purpose of moving the bowels at least once a day. By the use of a diet of milk, eggs, fruit stalks, and vegetables, the amount of material put into the intestinal canal, and capable of undergoing putrefaction and forming poisons, is much diminished.

Under the above plan of treatment he has found that the offensive discharge from the bowels has ceased, and the patients have gained in weight and strength.—Journal American Medical Association.

**Washing Out the Stomach in Chlorosis.**

The *Wiener Klinische Wochenschrift* refers to a communication by Dr. Pick, who publishes the results of some observations he made in Nohr-nagel’s clinic to determine the relation which exists between affections of the stomach and those not infrequent cases of chlorosis in which the leading symptoms are of a gastric character. Some connection between the two has been proved to exist in some cases of pernicious anemia. The *Wochenschrift* does not consider that Dr. Pick’s contribution gives a decided answer to the question, but points out the importance of one result of the experiments. He found, as others have done before him, in all the cases an atonic condition of the stomach, which had not digested the food taken on the previous day, although the patient was fasting at the time of the observation. In these cases Dr. Pick was able to cure the chlorosis quickly by washing out the stomach at stated intervals. In several instances no benefit had been derived previously by treatment with iron. Washing out the stomach prevents abnormal decomposition, which by auto-infection causes the blood dyscrasia. Dr. Pick, with the same object in view, and with equally favorable results, administered cresote when flushing could not be re-orted to.—London Lancet.

**The Action of Strychnine on the Stomach.**—The *Khirurgicheskii Vestnik* publishes an account of some experiments by Gamper on the action of strychnine on the stomach. Observations were made on seven persons, five of whom were in health. One suffered from gastralgia with excessive secretion of gastric juice, and the last (Gamper himself) from gastric catarrh. The observations extended from twenty to thirty days, and during the first and last week no strychnine was given to excite the stomach. Ewald’s test-breakfast was given, and observations were undertaken to determine the volume of gastric juice, the percentage of total acidity, the proportion of hydrochloric acid by weight, the digestive power of the juice, the result of fermentation, and the absorbent power and movements of the stomach. Nitrate of strychnia was given at breakfast time in doses varying from 0.002 gram to 0.005 gram, but sometimes increased to 0.015 gram. The activity of the stomach was increased in all respects, with the exception of that due to the ferment and the lactic acid. Gamper attributes the usefulness of the drug to the increased excitability of the medulla caused by the strychnine.—Ibid.

**Hypodermic Injection of Iodoform in Localized Tuberculosis.**—Dr. Weidemüller, in the *Münchener Med. Abhandlungen*, reports very favorably upon the treatment of localized tuberculosis by the injection of iodoform. This treatment was adopted in twenty-two cases, comprising four of di-case of the elbow-joint, four of the knee, five of the ankle and tarsus, and three of the wrist. Of the six remaining cases two were due to multiple tuberculosis, two to indolent abscess, and two to fistula after resection. A solution containing from two to three grams of iodoform in glycerine was used in each instance, with the following results: Two patients were cured, eleven considerably improved, three slightly improved, and in one case only was the treatment entirely unsuccessful.—Ibid.
KENTUCKY STATE MEDICAL SOCIETY.

The State Society will celebrate its thirty-seventh anniversary next week, May 4th, 5th, and 6th, in Louisville. Below is the programme in all its fullness and beauty, a glance at which will show that the members and visitors will not lack for entertainment in the scientific way. Some fifty-five papers are promised, and a special address, beside the President's, will be delivered by one of our most eloquent divines.

Remarkable to relate, no chairman of any standing committee will fail to make his report. This, Dr. Steele Bailey tells us, is the first time in the history of the Society such a thing has happened; and it is matter for gratulation, since it betokens unusual interest and good work on the part of these scientific dignitaries.

The number of volunteer papers is also unusually large, and it is significant to note that they are all home-woven, if not homespun, which leaves no doubt in the editorial mind that they are of full width, proper length, and fast in color, and therefore not likely to bleach out or go to pieces under the solvent and disintegrating processes of society discussion. We compliment their authors upon their production in advance, and bespeak for them each and all a place in the columns of the American Practitioner and News.

In the way of extra scientific entertainment, some private dinners and receptions, it is hinted, are likely to be given; but the crowning social feature is a reception at the Galt House, Thursday night, 5th inst., tendered the members and visitors by the profession of Louisville. This occasion will be graced by the ladies, and it is hoped that every married member will bring his wife, and every unmarried member his sweetheart with him.

Welcome, one and all! Next week our gates, our homes, our hearts will be open to our rural friends in medicine; come in and take us, and use us at your pleasure.

The Thirty-seventh Annual Meeting of the Kentucky State Medical Society will be held in the Masonic Temple, Louisville, Ky., Wednesday, May 4, 1892, beginning at 10:30 a.m.

The Annual Address of the President, Dr. H. Brown, of Hustonville, will be delivered at 8 p.m. on Wednesday, May 4, 1892, to be followed by an address by the Rev. C. J. K. Jones, D. D., of Louisville; subject, "My Doctor."


Report on Improvements in Materia Medica, by W. W. Richmond, M. D., Clinton.

Report on Gynecology, by David Barrow, M. D., Lexington.


Report on State Medicine, by J. N. McCormack, M. D., Bowling Green.


Report on Medical Ethics, by I. N. Sherly, M. D., Winchester.


Report on Relation of Chemistry to the Practice of Medicine, by F. O. Young, M. D., Lexington.

This completes the list of reports.


The Etiology of Croupous Pneumonia, by Simon Flexner, M. D., Louisville. Double Synchronous Amputation, with report of case, by R. Craig Falconer, M. D., Lexington. Some Remarks Concerning a New Remedy, by W. T. Boggess, M. D., Louisville. This is a magnificent programme!

Reduced rates have been granted on all railroads in the State. Members attending will be required, upon starting, to secure from the railroad agents, when purchasing their tickets, certificates of purchase. These are to be countersigned by the Secretary at the meeting, to enable the holders thereof to purchase return tickets at one third the regular fare; and such certificates must be secured from all the railroads over which members travel to and from Louisville. These specific directions are given to avoid trouble. A cordial invitation is extended to the medical profession of Kentucky to attend this our thirty-seventh annual session at Louisville, beginning May 4th at 10:30 a.m.

STEEL BALEY, M. D.,
Secretary.

Notes and Queries.

Editors American Practitioner and News:

TRAUMATIC PARALYSIS OF THE ARM.—Dr. C. D. Hustead, in the issue of the American Practitioner and News of March 12th, asks for the diagnosis and treatment of a new-born infant with paralysis of the arm.

It is evidently a case of traumatic paralysis of the arm, an ailment in the adult caused from a heavy blow on the shoulder-joint, and is hardly ever complicated either with a fracture or dislocation of the parts. It is a paralysis of rare occurrence, and its prognosis is very unfavorable. That such a grave accident should occur to an infant, with all its structural elasticity of the body, is most surprising.

In the adult subject I have seen a few cases
of the kind in my military experience, and one case in my practice in New York—the latter a laborer injured by a cake of ice falling upon his left shoulder, causing immediate and permanent paralysis of the entire arm. I was called to see this patient, and assured him that I did not think I could do him any good. Other surgeons undertook the case. But electricity, strychnine, massage, and other means had no beneficial effect whatever, but rather appeared to make matters worse.

About two years after the accident he applied to me again for treatment. The arm was cold, paralyzed, and in an edematous condition, and hung like a dead weight by the side of his body. He complained of its weight, and said it fatigued him. I proposed to remove the arm by amputation at the shoulder-joint. As he declined the operation, I sent him to the public clinic of the Medical University of the City of New York. They likewise proposed amputation. The further history of the case I never learned.

Many years ago a medical journal chronicled the case of a slave in New Orleans. A bale of cotton falling upon his shoulder rendered the arm paralytic. The best surgical treatment was procured, but without avail to relieve the case. Similar, also, in experience and in issue was a case in Georgia. A heavy branch of a tree fell on the shoulder of a slave; he too received a careful treatment, but with no favorable results. In all these cases there was no fracture nor dislocation.

As to the doctor's case, it will be a matter of interest to learn how it will terminate. In all probability the child will never have the use of the arm. This kind of paralysis is a distinctive traumatic disease, and suggests the query, why fracture of the clavicle and dislocation of the joint prevents its more frequent occurrence.

AUSTIN, TEXAS. J. P. HACHENBERG, M. D.

THE CHEEKS IN GLASS-BLOWERS. — In the last number of the Progrès Médical Dr. Regnault describes the condition of dilatation of the cheeks which occurs in glass-blowers, and which, so far as he has discovered, has not received much attention as regards the condition actually present and the cause of it. The work of glass-blowing is one requiring considerable skill and delicacy, and the apprenticeship necessary is a long one. Consequently boys commence the work, as a rule, at some time between the ages of twelve and fifteen, when the cheeks are not yet formed. The change is a gradual one, and for the most part takes place imperceptibly. When it is commencing there may be slight and unimportant pain. The pain disappears when the dilatation is achieved. It varies in degree, and frequently is only perceived when the cheeks are inflated. The limits of the swelling are inferiorly a line joining the chin and the ear, following the inferior oblique line of the lower maxilla; superiorly, another line starting from the ala of the nose, running up to the malar bone to strike the anterior limit of the masseter, which forms the posterior boundary of the swelling. The dilated wall is thus formed of the aponeurosis of the cheek, and of muscles such as the levator alae nasi, the zygomatics, the obicularis oris, and especially the buccinator. It is rare for this condition to be so marked as to be noticeable during repose.

An interesting accompaniment is the dilatation of Stenson's duct. After the patient has ceased to blow and the cheeks have subsided, there remains still some air in the canal, and gaseous crepitation can be perceived on pressing over it. Examination of the mucous membrane also shows the orifice of the canal considerably dilated, and a plug three millimeters in diameter can be inserted into it. Fortunately the inconveniences to which the condition gives rise are for the most part slight, consisting of occasionally some slight difficulty in keeping the food from getting between the teeth and the cheek, and a tendency to white furring of the inside of the cheek, necessitating the occasional use of an antiseptic mouth-wash.

Dr. Regnault gives the particulars of three cases which he has observed clinically, and calls attention to the interesting fact that sculptors, in representing Tritons blowing into shells, have reproduced exactly the deformity described.—London Lancet.

SO-CALLED "SPONTANEOUS COMBUSTION."— Under this title Dr. Hartwell records a curi-
ous experience which he had recently. He was one day hastily summoned into the woods while visiting a case in the outskirts of the town in Massachusetts where he lives, the messenger announcing that her mother was burned alive. On reaching the place indicated a human body was found in an actual state of conflagration. The body was face downward and resting on the forearms, the upper part of the chest, and the left knee. The rest of it was raised and held from the ground by the rigidity of the muscles of the parts. It was burning at the shoulder, on both sides of the abdomen, and on both legs. As Dr. Hartwell reached the spot the bones of the right leg broke with an audible snap, allowing the foot to hang by the muscles and tendons. The right shoulder-joint was exposed, and the intestines protruded through the burnt abdomen. The unburned clothing consisted of parts of a calico dress, a cotton vest, woolen skirt, and thick red woolen under-garment. Apparently the woman—for it was a woman forty-nine years of age, active in her habits, and strictly temperate—had been burning stumps, and her clothing had become ignited. Dr. Hartwell’s view is that the flesh, in a condition of unusual combustibility, had then caught fire, and had been able of itself to support combustion, and this is all that he means by so-called spontaneous combustion—viz., an undue liability of the flesh to actually burn. His view as to this condition is that it depends upon the fact that human bodies occasionally do possess this increased combustibility by reason of an unusual deposition of fat, and that age and spirit-drinking are factors in that they aid in the accumulation of fat. The interest of the case which he records he claims to lie in the fact that it occurred in a person of middle life, by no means obese, and not addicted to alcoholic indulgence.—Ibid.

Kentucky State Medical Society.—The thirty-seventh annual meeting of the Society will be held in Masonic Temple, Louisville, on May 4, 5, and 6, 1892. More than forty papers are already listed for the programme. By a resolution adopted last year the proceedings will be published in a volume of Transactions, thus placing our Society abreast the leading State societies of the country. The well-known medical stenographer, Dr. William Whitford, of Chicago, has been engaged to report the proceedings. I would respectfully request members to prepare papers and discussions on papers in view of this purpose, and thereby facilitate the work of publication.

Steele Bailey, M. D.,
Stanford, Ky., April 20, 1892.
Secretary.

Rabies in Paris.—According to the statistics of the Prefecture of Police, rabies has increased considerably during the past ten years. In 1880 there were 201 cases of canine rabies, and 61 persons were bitten. In 1891 there were 400 cases of canine rabies, and 143 persons were bitten.

Trichinosis in Coleraine, Mass.—The epidemic of trichinosis which was reported a few weeks ago from the town of Coleraine is at an end, the last victim having died of the disease. There were in all four deaths, and about forty cases, most of which occurred in one large tenement block. An examination of the muscles of the case which has recently died showed them to be filled with trichinae.—Boston Medical and Surgical Journal.

Russian Jews Stopped on the German Frontier.—Owing to the prevalence of typhus fever, the German Government has prohibited Russian Hebrew immigrants from crossing the frontier. In consequence, the Russian frontier towns have become very much crowded, and it is feared that typhus fever will spread through all of the border towns. Most of the immigrants who have been stopped were on their way to America.

A Plea of Insanity.—At a recent trial in Wisconsin, at which a number of men were indicted for murder on account of having taken part at a lynching case, the jury returned a verdict, finding that at the time of the lynching all of the defendants were insane, and therefore not guilty. They also found that since the crime was committed all but three had recovered their sanity, and were therefore discharged from custody.
Original Articles.

THE USE OF ALCOHOLIC LIQUORS AS A PROPHYLACTIC AGAINST DISEASE, AND PROMOTER OF GOOD MORALS.

BY T. B. GREENLEY, M. D.

In a letter to the London Times, last fall, Dr. Mortimer Granville, speaking of the "Teetotal Societies," said: "I am well aware that in professing a strong belief that abstinence from the use of wine and beer is a worse evil than the occasional abuse of these intoxicants, I am placing myself in antagonism to the majority of medical writers on this topic, but I am so strongly convinced of the accuracy of my view, after forty years' study and observation of the subject in its professional and social aspects, that I should be lacking in moral courage if I hesitated to express myself decidedly. I sincerely believe that incaulcable harm has been done to the average human organism, with its functions, which we are wont to classify as mental and physical, by the spread of teetotal views and practices. There is less stamina in the life of the average Englishman now than there was forty years ago. He may live a little longer, but he is not so well able to resist the invading germs of disease, or to recover from the debilitating effects of such an invasion as he was when good wine and sound ale formed integral parts of his daily diet." He doubts whether it acts as a factor in the production of insanity, and remarks: "So far as I have been able to ascertain the proportion of those who drink are so small as to be insignificant." In regard to physical diseases, he says: "A calm and careful survey of the statistical and clinical facts will show that not a few terrible diseases, such as cancer, consumption, specific maladies of low type, for example, diphtheria, the worst forms of gout, nerve troubles, and a host of minor ailments, having for their proximate, if not ultimate, causes those depressed and asthenic conditions of vital force in the organism which render it as a whole weak in the presence of its enemies, and as to its constituent parts, prone to the degradation of organic types of life, have developed and extended their ravages since the practice of substituting 'table waters' and watery wines for sound—malt, hop, and grape—fermented beverages, has sprung into fashion at the instance of the temperance advocates." He further remarks: "This fanatical crusade against the drinking of fermented liquors has been carried too far. It has passed beyond the legitimate limits of a fad, and is beginning to assume the proportions of a public nuisance and cause of injury. I honestly believe the propagation of teetotal doctrines is exercising a destructive influence on the moral, mental, and physical health of the people."

Dr. Granville has been a resident of London for many years, and his opportunities for observing the effects of intemperance no doubt have been very good; and for any man, especially a medical man, with such opportunities, to form such a conclusion, that "abstinence from the use of alcoholic liquors" is calculated to harm the organism and lower the stamina of the Englishman, or any other man, and thereby render him less able to resist the germs of disease, or to recover, from their debilitating effects, much less to diminish his mental power and demoralize him, must possess very weak powers of observation or mental obliquity. It
is diametrically in opposition to what everybody else has observed who has written on the subject. He acknowledges that temperance people may live longer, and it would seem to a reflecting mind that if intemperance shortened life, it at the same time rendered its subjects less able to resist disease and death, as compared to the temperance man.

It has long since been observed by the profession that drinking men possess much less resisting power to the invasion of disease, as well as recovery from it. It is said to be a rare thing that a drunkard recovers from pneumonia or cholera. This has been the writer's observation in a practice of nearly half a century. In that time, my recollection is, I have known only one drunkard to recover from pneumonia. In 1854 I had fourteen patients with cholera, all of whom recovered but one, and he was a drunkard. It would be interesting to have an explanation of the process, how the use of alcoholic liquors preserved health and prevented disease; also, how its abstinence energized the people and produced disease. It has long since been known to the profession that the use of alcohol is the primary cause of diseases, both functional and organic.

In speaking of the diseases which so commonly result from the use of alcoholic liquors, I can only, from want of space, allude to them by name, without giving the rationale of their production. Functional troubles are mainly confined to those who are termed temperate or moderate drinkers. The first of these is usually alcoholic dyspepsia (see Dr. Richardson on Modern Diseases); secondly, he is likely to have sensory disturbances; third, vascular changes in the skin, due to relaxation of the capillaries, by which this organ becomes engorged; fourth, undue thirst is very common. This is due to the great affinity alcohol has for water. A temperate drinker will often consume as much fluid as five or six times the amount that the system demands in a normal state; fifth, symptoms of systemic failure. If the moderate or so-called temperate drinker should be naturally of a robust constitution, the vital powers of the system may for a long time resist the evil effects of alcohol to such an extent that the subject is not aware of its disease-producing tendencies until he finds his physical powers are failing him. He discovers that he can not resist the injurious effects of unpleasant weather; the least exposure induces an attack of neuralgia, rheumatism, coryza, gout, etc. He finds his muscles becoming relaxed, and, in a word, that before his time he finds himself an old, decrepit man.

When we come to investigate the evil effects resulting from what might be termed the immoderate use of alcoholic liquors, we find many diseases of an organic character. Persons suffering from these results might not necessarily be what is known as regular drunkards, but regular drinkers to an immoderate degree. In this class of drinkers we may have disease of the heart, brought about by degeneration of fiber, or interposition within the muscular fiber of fatty substances.

2. Disease of the blood-vessels is a very common trouble, due also to change of structure, and may precede the heart disease or advance with it.

3. We may also have pulmonary disease due to alcoholic excess. This may be and usually is in the form of alcoholic consumption. I have known at least one case of it. Dr. Richardson, of London, in an analysis of two thousand cases, found thirty-six of this character, or nearly two per cent, which occurred in inebriate cases. It occurs rather late in life, at least hardly ever before the age of thirty-five years. It is rarely noticeable, either by the patient or his friends, until fatal symptoms supervene. The first symptom is pleuritic pain, which may soon be followed by spitting of blood, when the end is near by. It is regarded by Dr. R. as incurable.

4. Disease of the liver. This is very common in this class of persons, especially cirrhosis, with its dropical accompaniments. We may also have glycosuria or diabetes. These troubles, like alcoholic phthisis, soon terminate fatally.

5. Disease of the kidney. One variety of Bright's disease is brought about by change or deterioration of its structure by undergoing fatty degeneration. When this condition ensues, the system soon runs down by the drainage from the blood of its albumen or colloid
element. This condition also favors the formation of calculus in the bladder.

6. Diseases of the eye. Observers have noticed that cataract is in some instances an alcoholic disease. The change in the lens is brought about by the effect of alcohol on its water, due to its great affinity for that fluid. Aside from this effect on the eye we have many cases of conjunctivitis, which may soon engender trachoma.

7. Alcoholic insomnia. This results from relaxation of the vessels of the brain, which allows engorgement of blood, and thereby prevents natural sleep.

8. Nervous diseases. "The brain and spinal cord and all other nervous matter, like all other tissues, become subject, under the influence of alcohol, to organic deterioration." We have a manifestation of the involvement of the nervous system by muscular action uncontrolled by the will.

9. Epilepsy. This seizure is usually, at first, at night and during sleep, and when the victim wakes he supposes he has one of his attacks of nightmare. "It finally comes on in the daytime, when the nature of the disease is fully declared." Of course this disease is incurable, being due to changed structure of the brain.

10. Paralysis from alcohol. This disease may be local or general. The first may affect a single limb, or one side of the body, leaving the mental faculties intact or only slightly impaired. General paralysis comes on slowly, at first being manifested by loss of the power of speech, gradual loss of memory, with but little will power, and finally the "man becomes reduced to the condition of the mere animal." Aristotle remarked, "that animals have a voice, but man speaks." The inebriate paralytic retains his voice, but can not speak. He is now helpless, and receives his food at the hands of his nurse. He presents the "picture of breathing death."

11. Mental alienation. Dipsomania is a common result of intertemperate habits. "In those who are affected with this form of alcoholic disease a mixed madness and sanity is established, in which the cunning of the mind alone lives actively, with the vices that ally themselves to it." If pursued sufficiently long, this condition will eventuate in paralysis. "There is another form of mental disease named mania a potu, and is one of the most desperate of the alcoholic evils." The victims of this malady are not regular drinkers or drunkards, but take intermittent sprees. During the intervals between the drinking spells they are quiet and feel remorse and promise to reform; but when the spell is on one is usually violent, and a terror to his neighbors. "He has sufficient nerve power to wield his limbs, but not sufficient will power to control his actions."

12. Delirium tremens. In this disease "the delirium is of the most extreme kind, now violent, now passionate, ecstatic; again low, wandering muttering; a delirium in which imagining fears and conjured up horrors of the mind are realities to the sufferer. To this degraded mental condition is added the disturbance of the whole muscular system." The powers of life may be so depressed that the temperature may drop to several degrees below normal. It is possible that the patient thus afflicted may recover by eliminating the poison from the system.

Besides this direful catalogue of diseases, which may be engendered by the excessive use of alcohol, we may have its baleful influence transmitted to posterity from parent to child. Dr. Richardson, in speaking on this subject, remarks: "But no one of the transmitted wrongs, physical or mental, is more certainly passed on to those unborn than the wrongs inflicted by alcohol. Many specific diseases engendered by it in the parent are too often stamped in the child, while the propensity to its use descends also, making the evil interest compound in its terrible totality."

In order to demonstrate the erroneous position of Dr. Granville in regard to the health of the people as affected by entire abstinence from the use of alcohol, I will now make a comparison of the death-rate of the population of England and Wales thirty or forty years ago with that of the present time, or as late as 1889. The population of these countries in 1861 was 29,000,000, and the deaths that year numbered 433,000, or at the rate of 21.75 per 1,000. In 1859 the population was 29,000,000, and the deaths 517,000, making the loss of life
17.83 per 1,000. It would be a difficult matter for a statistician to discover any cause herein that shortened life, and if I could have gone back forty years, instead of thirty, the time the doctor speaks of, no doubt the difference in longevity would have been greater. According to these statistics, we must infer that the abstinence from alcoholics has not increased the mortality of the people. The doctor, in his letter, maintains that certain diseases have become more prevalent in England than before the existence of temperance societies. To some extent this may be true, as it respects cancer and diphtheria. I have no statistics in this regard, and can give no correct statement of the matter, but am of opinion that these two diseases are more prevalent in this country than they were forty years ago. But I would regard it as a cranky opinion to say that this was due to abstinence from the use of ardent spirits. He says that gout is also more prevalent in his country than formerly, and charges the fact to temperate habits. If any one thing in the etiology of disease has been settled in the minds of the profession it is that the use of alcoholic liquors tends to the production of gout.

We will examine for a moment the educational and moral condition of the doctor's people forty years ago and at the present time. In 1853, 30.4 per cent of the men and 43.9 per cent of the women who were married were unable to write their names in the marriage register. In 1888 only 7.8 per cent of the men and 9 per cent of the women were unable to so write their names. This change speaks well for the English people, and seems to be in opposition to the theory that the use of alcohol is beneficial. As a rule, it is not the drinking class who take interest in education and send their children to school.

In 1845 7 per cent of the children born in England and Wales were illegitimate; in 1889 the illegitimate births amounted to only 4.6 per cent of the whole. This difference is on the side of morality, and certainly speaks in favor of temperance.

In 1851 21,500 people were convicted of crime, when the population was about 18,000,000; and the convictions in 1889 were 9,000, when the population was 29,000,000. This is a wonderful change in point of morals. In 1851, out of every 1,000 population 1.2 of that number were convicted of crime; but in 1889, or thirty-eight years after, out of each 1,000 population there was only three tenths of one per cent so convicted. To what can we attribute this great improvement in the morals of the people but to abstinence from alcoholic liquors; and yet the doctor is unable to see the favorable change among his own people, and asserts that temperance societies are becoming a dangerous nuisance.

In 1861, out of 20,000,000 population, there were 860,000 paupers, or 43 out of every 1,000; and in 1890 there were 787,000, or 26 in each 1,000 of the people. This shows a great change for the better as to the condition of the English people in the last thirty years, being a gain in their favor of 40 per cent. Pauperism is the natural offspring of intemperance.

Now, I have reviewed the main points pertaining to the welfare of the English people within the last thirty or forty years, as it pertains to their longevity and moral condition, and think I have shown a great change for the better, and that temperance societies have not proved very detrimental to that people. For if we show a greater longevity of a people we infer that they enjoy better health, and the conclusion is that their physical condition must be better. And if we make a comparison of educated people with those who are ignorant, we must conclude that their mental condition is superior. Further, if we compare a population which affords a large per cent of criminals and paupers with one which affords only half as many, we naturally infer that the latter is the more moral.

As to mental alienation produced by intemperance, I have no positive statistics, but when we inquire into the cause of insanity among the inmates of insane asylums we are forced to believe it is very great.

From a review of the foregoing statistics, I think I have very clearly shown that the stated observations of Dr. Grauville as to the evil effects of temperance societies were entirely erroneous, and that temperance societies, which have worked such a moral revolution in Eng-
land, do not, as the doctor asserts, constitute a dangerous fad, nor an injurious nuisance.

A man of education and general intelligence, as all admit Dr. Granville to be, must pass along the highways and byways of life blindfolded not to observe the dire effects of intemperance on every hand. He has shut his eyes to the squallor and wretchedness of the drunkard's home; he does not read the daily accounts of murders, of woundings, of broils among drinking men; he has not inquired at the penitentiaries, jails, and houses of correction, of the inmates, why they are thus incarcerated. He has not visited the almshouses and homes of the pauper and inquired as to the cause of his poverty and degradation. He has not read the daily published record of applications of the poor, starved, and beaten women for divorce from besotten, drunken husbands. He is not posted as to the per cent of accidents that occur on railroads and in other ways on account of drunkenness, and many other things, id omne genus.

The use of alcoholic liquors may be said to be injurious to the health of all well persons; and if regularly continued indefinitely will finally produce pathological conditions.

Dr. Richardson, of London, in speaking of the evil effects of alcohol on man, says: "In whichever way he turns, he sees nothing but disease and death; mental disease, mental death; physical disease, physical death."

It was formerly administered in disease as a food, but that idea has long since been proved to be erroneous. It is generally regarded as a stimulant, but Dr. Richardson and others prove clearly that it is not, strictly speaking, a stimulant, but somewhat similar in its effects to chloroform or ether; the first effect being exhilarating, and the second narcotic.

Dr. Parkes and Count Wollonies made some experiments on man as to the effects of alcohol on the heart. They took the number of beats for eight days of a healthy young man, averaging each day 77 beats per minute, making 110,880 in the twenty-four hours. On the ninth day with one fluid ounce of alcohol the heart beat 430 times more. On the tenth day two ounces were given, with increase to 1,872 beats more. On the eleventh day four ounces were given, with 12,960 beats more. On the twelfth day six ounces were given, with 18,432 beats more. On the thirteenth day eight ounces were given, with 23,904 beats increase; and on the fourteenth day eight ounces were given, with 25,488 times more. Allowing the heart to beat with the same force under alcohol, as without it, on the last two days it was doing one fifth more work. The daily work done by the heart, in health, is estimated at one hundred and twenty-two tons lifted one foot, and at this rate its increased work the last two days amounts to twenty-four tons lifted as high.

It is no wonder then, under such an increased amount of work, the organ will soon suffer very greatly in its nervous supply, besides the detriment to other organs from congestion. In the second stage the nervous system becomes involved through the effects produced on the spinal cord. This consists in want of muscular co-ordination.

In the third stage we have diminished temperature. This is due to involvement of the cerebral mass. In this stage Dr. Richardson says "that reason is off duty, and the animal instincts are laid bare; the coward shows up more craven, the braggart more braggart, the cruel more cruel, the ignorant more ignorant, the untruthful more untruthful, the carnal more carnal."

Drs. Day and Crothers have the credit of determining positively that inebriety is a disease, and that "all the symptoms are incidental to the effects of alcohol, marked by pathological changes, and the inability of the patient to cease the use of spirits." Dr. Crothers further asserts that "inebriety is the active cause of from fifteen to fifty per cent of all insanity; from thirty to eighty per cent of all idocy; from sixty to ninety per cent of all pauperism, and from fifty to eighty-five per cent of all crime"—then asks the question, "Who can estimate the relief of the taxpayers by the removal of the perils to both property and life from drunkenness?"

Dr. Day, of Boston, in his late Annual Report of the Washingtonian Home for the Treatment of Inebriates, says: "On the individual the effect of vicious alcoholic indulgence is disease of the body. Sooner or later it must
succumb. Disease of the mind is not far off. It may be delirium or insanity."

Prof. Martin, of Johns Hopkins University, says: "It is not strange that the liver often becomes diseased from the use of alcoholic drinks, followed by fibrous degeneration; the true liver substance is crushed and killed, and what remains is a shrunken, hard, rough mass, well known to the pathologist as hob-nailed liver."

Dr. Formad found, in the dead-house autopsies of the Philadelphia Hospital, that "in two hundred and fifty chronic alcoholists nearly ninety per cent had fatty degeneration of the liver; six per cent had congestion or a drop-sical state of the brain; the same number an inflamed or degenerated stomach, while not quite one per cent had normal kidneys."

Dr. Benjamin Rush said that "a people corrupted by strong drink can not long be a free people."

Dr. Josiah Strong "shows by reliable statistics that the use of intoxicants is more dangerous for this generation than it has been for any preceding one, and he asserts his belief that civilization must destroy the liquor traffic, or be destroyed by it."

Demme studied ten families of drinkers, and ten families of temperate persons. The direct posterity of the ten families of drinkers included fifty-seven children. Of these, twenty-five died in the first weeks and months of their life; six were idiots; in five a striking backwardness of their longitudinal growth was observed; five were affected with epilepsy; five with inborn diseases; one boy was taken with chorea and became idiotic. Thins of the fifty-seven children of drinkers only ten, or 17.5 per cent showed a normal constitution and development. The ten sober families had sixty-one children, five only dying in the first weeks; four were affected with curable diseases of the nervous system; two only presented inborn defects. The remaining fifty, 81.9 per cent, were normal in their constitution and development.

Scientists and medical men generally have arrived at the conclusion that alcoholism is a disease, and that the inebriate should be cared for by the State, the same as the ordinary insane; that the laws should be such as to prevent him from wasting his property, thereby impoverishing his family and destroying himself under the plea of freedom of action or self-liberty.

Then let the profession make an active move in the direction of diminishing this species of self-destruction, the greatest curse of the human race, and thereby relieve ourselves of the common charge alleged against us of making drunkards by prescribing ardent spirits in the treatment of disease.

Dr. Granville does not directly encourage drunkenness, but the moderate use of alcohol. But we know that intemperance results from moderate drinking, and that no drunkard is ever reformed except by total abstinence. Thence we see the dangerous ground he occupies.

ORELL, KY.

AMERICAN IPECAC.

BY GORDON L. CURRY, PH. G.†

Gillenia stipulacea, Nutt, and G. trifoliata Moench. Natural order: Rosaceae. Tribe: Spiraea. Synonyms: American Ipecac, Indian Physic, Bowman's Root; Ger., Gelleninwürzel, Fr., Racine de Gillenic.†

According to Gray the name is derived from A. Gille, an obscure German botanist or physician. The title, "Bowman's Root," though applied indiscriminately to both species, is however properly the name of G. trifoliata, while in like manner "American ipecac" is the English name for G. stipulacea. This genus of plants is but little mentioned in materia medica, indeed but three noteworthy accounts are made, namely, "National Dispensatory," Stille and Maisch, "Organic Materia Medica" of Maisch, and Barton's "Vegetable Materia Medica of the United States." The last mentioned authority being, as far as botanical description and history are concerned, by far the most exhaustive. This work was published in 1817, in Philadelphia, and quoting from page 71, speaking of G. stipulacea it reads: "... this second well-characterized species fully establishes the validity of Moench's genus, Gillenia, and will justify me in restoring it."

* Thesis presented to Louisville College of Pharmacy, 1892.
† Maisch and Stille, National Dispensatory.
Neither Michaux nor Muhlenberg has noticed the plant, it was first described by Wilkendow, whom Pursh has quoted. The late Professor Barton observes in his "Collection," speaking of the spiraea trifoliata, "It is said that there grows in the State of Kentucky another species which is still more valuable as an emetic than the spiraea trifoliata." (Vol. II, p. 39) . . . "There is no doubt that the two species have heretofore been generally confounded under the specific appellation, trifoliata, by the American botanists, and indiscriminately used by physicians in the country; though it would seem by Dr. Barton's remark that the circumstances of another species existing in the Western States had been communicated to him with the assurance that this was the more valuable."

Botanical Description. A stout three or four foot perennial herb, stems one to many, somewhat woody and bearing numerous stipulate leaves. Leaves palmately three divided; lobes lanceolate; margin doubly dentate; stipules large, leaf-like, flabelliform and slightly three-lobed.

Calyx: Monosepalous and five-cleft.

Corolla: Pentapetalous, petals adnate to throat of calyx, lanceolate, somewhat unequal, white or tinged with rose, usually white.

Stamens: 10 to 20, short.

Pistils: 5, becoming reddish colored, 2-4 seeded pods in the fruit.

Seeds ascending, somewhat albuminous, and inclosed in a coriaceous covering.

Flowers loosely corymbose or panicked.

Flowering in June and July. *A

Rhizome: 2-4 inches long $\frac{1}{2}$-2 inches in diameter, much branched, gnarled, and twisted, grayish brown in color, internally lighter, taste very bitter, odor slight and earthy. The exterior surface is marked at intervals with scars of previous years' growth. The bark is somewhat thick, cracking horizontally on drying. When dry the bark may be removed by simply stripping between the forefinger and thumb, exposing a tough, fibrous, woody center, breaking with an uneven fibrous fracture.

Collection. The supply used in my investigations was gathered in Southern Indiana, in a chain of hills (familiarly known as the Knobs) between New Albany and Edwardsville. In its collection I found that by loosening the earth on one side of the plant and inserting the fingers beneath the mass of roots, they could be torn from the soil without the loss of any of the important rootlets; I mention the fact for the benefit of those who wish to collect the plant, and who would perhaps undertake the laborious task of digging the whole of the root in its matted mass from the soil. As a peculiar fact concerning the G. stipulacea (I collected only this species) I would remark that, apparently this plant grows more vigorously on the top of a hill, or on the side farthest from the north, indeed I found but few plants on the northern slope of any hill; this peculiarity, however, may be only local. The soil is very dry during the months of its most rapid growth, June and July, and presumably originates from decay of a soft limestone, many fragments of which are found mixed with it.

Microscopical Structure. The three cortical layers are characterized as follows:

First and outer layer, the epifoam, is made up of cells mostly cubical or flat—rectangular; the latter about three times broader and longer than thick, and filled with a brownish-yellow coloring matter to the depth of from six to ten cells. This coloring matter closely resembles and is probably identical with the contents of the resin cells of the central woody tissue.

The second layer or mesofoam is from 9-15 cells in thickness, the cells being of more irregular outline than those of the previously mentioned layer. They are tabular, with two surfaces (inner and outer) flat, but the edges lack the clear-cut squareness, and taper as they approach each other, giving the end view somewhat the appearance of a spindle. The cell content of this layer is colorless and granular, a micro-chemical examination proving it to be starch.

The inner layer of the bark is very thin and apparently merges into the cambium without any great difference of characteristics, the cells presenting the appearance of half-developed cells of the middle bark. The woody portion of the rootlets is of no therapeutical value whatever, and therefore a description will not be

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*A few specimens were found in bloom as late as September 3, 1891.
given, though an examination was made. It merely contains a few scattered resin-cells and some small amount of starch.

Analysis. On drying a specimen weighing 57 grams, first in air and then in an oven at 85°-100° F., I found that it lost 24.5 grams or nearly 43 per cent (42.9 per cent), while a quantity weighing 7480 grs. with like treatment lost only 35.9 per cent.

Ten grams of the finely comminuted drug left .16 gram on incineration.

Fixed oil: 20 grams of the drug in fine powder was macerated for seventeen days with 200 cubic centimeters of benzene; on the expiration of the seventeenth day the loss by evaporation was made up, and 100 cubic centimeters of the resulting greenish-yellow liquid evaporated. The residue consisted of a fixed oil and a small amount of fatty matter. The oil was greenish-yellow, becoming brown on exposure to the air, showing presence of a probably oxidizable body; the odor was slight and taste bland, and it was easily saponifiable with the caustic alkalies. The total weight of the oil and fat was 0.30 gram, and this was insufficient for a full chemical or even physical examination. As a test for its volatility, several drops of it were placed on note-paper and subjected to a temperature of 212° F. for forty-eight hours with no change whatever, the size of spots remaining constant. Again, 0.20 gram of it was heated in a porcelain capsule for several hours with no decrease in weight. (To verify the freedom of the benzene from any fixed matters, several drops of it were also placed upon paper, but they disappeared in ten minutes without heat.)

The powder, just treated with benzene, was then placed upon a filter and thoroughly washed with the benzene, care being taken to remove all adhering particles of the powder from the sides of the flask. After freeing it perfectly from any remaining traces of the oil or fat by this means, the powder was dried and allowed to macerate for a period of eight days with 200 cubic centimeters of purified ether. On the ninth day 100 cubic centimeters of the resulting yellow liquid was evaporated and found to yield a resinous residue weighing 0.40 gram. At this stage of the operation the residue of a previous maceration of 10 grams of original drug was added, thus making a total of 30 grams of original powder. The weight of this total, after treatment with benzene and ether, was 28.05 grams, showing a loss of weight equivalent to 1.95 grams, this being the amount of soluble constituents dissolved out by these two menstruums.

The ethereal maceration is shown by the following table:

<table>
<thead>
<tr>
<th>Percolate</th>
<th>Weight of Residue</th>
<th>Color</th>
<th>Taste</th>
<th>Amount of Drug Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 c.c. Ether</td>
<td>1.05 gram</td>
<td>Reddish-brown</td>
<td>Bitter</td>
<td>20 grams</td>
</tr>
</tbody>
</table>

Of 1.37 grams of this ethereal residue (0.07 gram of a previous operation being added) 0.48 gram was soluble in water and 0.89 gram in alcohol. The alcoholic solution contained a bitter resin and some bitter principles.

The aqueous solution produced a darker color on standing, and in a slight degree showed evidences of fermentation. This liquid on evaporation yielded a dark brown residue almost inodorous and very bitter taste. This residue on testing for alkaloids produced negative results; indeed, careful examination for alkaloids, made subsequently, satisfactorily established their absence.

Fehling's solution, however, was decomposed, evincing presence of a saccharine principle, either existing naturally in the plant or the product of the decomposition of some body, probably a glucoside. To determine the identity of this substance the following method was resorted to: Twenty grams of the finely comminuted drug was digested with 200 cubic centimeters of hot distilled water for three hours. The liquid was then strained off and enough distilled water added through the strainer to make 200 cubic centimeters. This liquid was then cooled and filtered, and then shaken with an equal amount of ether. The mixture was then allowed to stand, and when the two layers had separated they were drawn off, one at a time, by means of a separating funnel provided with a stop-cock. The ethereal layer was marked "Ether No. 1," the aqueous, "Aqueous No. 1," and both were set aside for examination.
The ethereal layer was first examined. This was done as follows:

The liquid was placed in a beaker-glass and evaporated at a low temperature, leaving a small amount of a slightly yellowish crystalline residue. A portion of this residue, on being dissolved in acidulated water, decomposed Fehling's solution very readily. The remainder of the residue was then dissolved in water and treated with ether as before; the evaporation of this resulting ethereal layer yielded a small amount of white, feathery crystals, soluble in water, alcohol, and dilute acids. After boiling with sulphuric acid and treating with Fehling's solution, a reduction of the copper immediately ensued. Other tests for glucosides produced positive results. As the glucosidal nature of these crystals is so clearly depicted they would naturally require a distinctive name, hence I would suggest Gillein.

The reactions of Gillein following are characteristic.

<table>
<thead>
<tr>
<th>Reaction</th>
<th>Color</th>
<th>Taste</th>
<th>Odor</th>
<th>H₂SO₄</th>
<th>HNO₃</th>
<th>H₂CrO₄</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pink then Brown</td>
<td>Bitter</td>
<td>None</td>
<td>Yellow</td>
<td>Dark yellow</td>
<td>Greenish yellow</td>
<td></td>
</tr>
</tbody>
</table>

The aqueous solution marked "Aqueous No. 1" was next examined, and I found that on standing for a few days it had deposited a powdery pinkish substance, which, when filtered out and dried, was scanty, brown in color, and insoluble in alcohol and water. The following are its characteristics:

Before heating and during evaporation this aqueous solution produced no reaction with the alkaline copper solution unless previously heated with sulphuric acid (any strong mineral acid, I presume, would have answered), showing the stability of the glucosidal body.

The residue of the above evaporation was taken up in the smallest quantity of distilled water, leaving a reddish and flocculent but not abundant residue, apparently constituting the coloring matter. The whole was then filtered and the clear liquid evaporated to dryness. The result was an amorphous substance, soluble in water, sparingly so in alcohol and ether, and presenting all the reactions of a glucoside.

It does not react with iron salts or gelatine, showing absence of tannin. Sulphuric, nitric, and chronic acids cause no color reactions. This principle is inodorous, slightly yellowish, the taste at first faint, but becoming very bitter in a short time.

As the title of this second glucosidal body I would suggest Gillénin.

A crude analysis of the plant G. trifoliate was made by W. B. Stanhope, a student in the Philadelphia College of Pharmacy, in 1856, and in his writings he makes mention of a principle causing a blood-red color reaction with nitric acid. This fact is conclusive evidence that the two plants so nearly related contain a markedly different principle, for, as we have seen, no principle I have found yields a blood-red color with the acid named. I will shortly begin a careful chemical analysis of the principles of both species, and trust to submit my report at an early date.

**Action.** Gillemin, the crystalline glucoside, produced nausea, and almost emesis, when taken in the dose of $\frac{1}{4}$ grain. Had $\frac{1}{2}$ or 1 grain have been taken, I feel confident that emesis would have been produced.

Gillénin, the amorphous glucoside, was obtained in quite a small quantity, hence an authentic statement concerning its properties can not at present be made. I believe, however, that its action will be found to be similar to Gillein. Note is made by Stille and Maisch that the dust of Cepheliis Ipeacantha attacks the mucous membrane of the nose and throat, producing congestion of the larynx and bron-
ABORTION.

BY E. S. M'KEE, M. D.

It is not the object of this paper to cover the entire field included under the heading, but to merely touch upon some special points of the subject. The discussion is here limited, so far as possible, to the expulsion of the products of conception during the first trimester, omitting the consideration of miscarriage and premature labor.

The statistics of abortion, if reliable, give much information. The following figures probably come near the truth, 18.6 per cent of the whole number are habitual:

Uterine diseases account for 50 per cent; reflex causes, 21.528 per cent; syphilis affecting the fetus, retroflexion, salpingitis, and rheumatism, each, 7.143 per cent.

Treatment is followed by cure in 78.477 per cent, the patients subsequently bearing healthy children, while sterility results in 21.528 per cent, of which 14.286 per cent have incurable uterine affections, or are past childbearing, and 7.242 per cent remain healthy but sterile; 90 per cent of childbearing women abort once or oftener, and about one pregnancy in ten terminates abortively.

During the years from 1867 to 1875 inclusive New York City reports 197 deaths resulting from abortion, a number probably far short of the truth. During seven years the Rotunda Hospital, Dublin, only had one death from abortion.

The causes producing abortions are extremely variable. Sometimes the least thing is operative, and again an injury of the greatest magnitude may be insufficient. The discordant professional opinions on the subject suggest the necessity of renewed researches.

Conditions of maternal blood often play an important part in the causation of abortion. Powerful emotions, as loss of friends, fires, explosions, and accidents of various kinds, are thought to alter the blood and thus bring about this result. The condition of the blood which accompanies infectious disease is a frequent source. When quinine is given to pregnant women it should be combined with a small quantity of morphia, which will overcome the danger. It is doubtful if quinine will originate uterine contractions, but it will increase them if once created.

The constant inhalations of the odor of cotton seed and plants, especially if nipped by the frost, has been thought by some writers to cause abortion in women who are picking cotton. Others think the stooping position and the friction of the apronful of cotton on the distended abdomen the real cause.

Lead poisoning from lead pipes is reported as the origin of abortions in several instances. Cardiac insufficiency has been recently described as resulting in abortion, and is cited by Thomas as a sufficient cause for artificial abortion. The treatment is to relieve the heart by the recumbent posture.

Cigar-making, and occupations involving constant manipulation of tobacco apparently lead to abortion.

Repeated abortions occur in some women,
leading to the term habitual abortion. This unscientific term is only applied to those cases for which we have no better name. Having excluded maternal, fetal, and uterine causes, we are forced back on habitual abortion, which is a befiting designation for such cases. We can only explain them on the theory of a hyperesthetic condition of the uterine system of nerves. These poor women who have acquired this habit of aborting merit our sincere consideration. They lose heart, consider themselves "an abortive enterprise," and wonder "If so soon to be done for, What were they begun for?"

These fruitless, nonproductive women are aptly described by Milton:

"Abortive as the first born bloom of spring, Nipped by the lagging rear of winter's frost."

Criminal abortion is termed by our European relatives the American sin, which they think so common among our people as to deserve this appellation. The Americans speak with horror of the European percentage of illegitimate births. They reply that in this country we hide our sins by the destruction of unborn babes.

Physicians meet in practice women who would scorn to speak evil against a neighbor, who are tender and kind, leaders in social and even in religious life, who are above suspicion as to chastity, yet who do not hesitate to murder their own children, provided only they be small enough. They do this not only once but repeatedly; and not only do they commit this crime, but talk about it very unconcernedly, or engage in disseminating a knowledge of the work among friends as earnestly as they would work for a supper for the benefit of a hospital, kindergarten, or the far distant heathen. They would fear to reverse the hands of a watch, but would break the laws of nature in their own human mechanism, a hundredfold more delicate, complicate and precious. But let not all this be ascribed to sin alone, but partially to tender-heartedness. Many have been far more tempted by a woman's tears to lend her the knowledge which would save her from disgrace than by the large fee she offers.

The indications for the induction of abortion are well presented by Parvin (Annual of the Universal Medical Sciences, 1891, I—7). He finds it somewhat necessary in diseases of the kidneys, though prophylactic measures will generally suffice. The same is true of chronic heart disease. Results are satisfactory in diseases of the respiratory organs, and in chorea where the life of the mother is jeopardized, and other remedies fail. Eclampsia is infrequently an indication. Cancer of the rectum is occasionally so, as is also mammary cancer, and severe cases of rheumatism.

When the true conjugate of the pelvis is not less than seven centimeters, Von Brehm, by dieting the mother so as to prevent the formation of adipose tissue in the child, has avoided the necessity of inducing premature labor.

The induction of abortion has changed somewhat in method during recent years. Among the instruments recommended are, Hegar's dilator, followed by a tampon saturated with a four-per-cent solution of salicylic acid. An improvement on Tanier's elastic balloon consists of a pear-shaped rubber ball, which, when reduced to a small size, is introduced into the uterine cavity and inflated. When pains commence it is slowly expelled in its distended state, and the fetus soon follows. Iodoform tampons are claimed to bring about the same result more safely and quickly than the sponge tent.

Puncture of the membranes is sure but slow, inconvenient and dangerous. The bougie is not entirely safe, and not always sure. The average time of bringing on pains by the bougie is much greater than after puncture. Galvanism is recommended as safe and sure.

The diagnosis of inevitable abortion is ever desirable, but unfortunately the signs are not always sure indications. Hemorrhage may continue for a considerable time and return at frequent intervals, but the pregnancy may go on to term. Marked softening and dilatation of the cervix are generally followed by expulsion of the ovum, but not always. Three authors report cases where the portions of the uterine contents were expelled, and abortion did not follow.

Given, ruptured membranes, a persistent hemorrhage, dilated os, ovum dead and presenting, portions expelled, abortion is inevitable.
No class of cases causes us more anxiety and doubt than do abortions. Our masters lead us different paths; and if we go to the learned societies and listen to their discussions, we are surprised at the diversity of opinion. As there is no fixed plan of treatment the practitioner can follow almost any course which strikes his fancy and find respectable authority to confirm him.

The radical and the conservative methods in the treatment of the retention of the placenta and membranes have their advocates in every country. It is seriously considered by some that the safety of the patient and the comfort of the physician are best served by the immediate removal of the secundines, after the expulsion of the ovum, in every case where it can be done without force sufficient to injure the woman. The curette in skillful hands and with a proper patient is a means of good after abortion, yet under other circumstances it is an instrument of danger.

In the text-books we find remarkable unanimity in recommendation of the expectant plan, while the recent contributions to medical literature favor immediate removal.

Careful consideration of the facts and circumstances of each case will result in a more intelligent conduct than the observation of any dogmatic rule. All will accord that the early removal of the secundines is desirable, but the question arises, when is it best?

Abortion is not physiological as delivery at term, but is a pathological process, a premature death, a breaking up and tearing away, an abnormal condition. The dangers from septicemia and hemorrhage, the local inflammations, the organic changes, the sub-involutions and septicemia arising from decidual retentions, render early, prompt, and thorough removal a matter of paramount importance. Safety, speed and completeness are the principal questions for consideration.

Are we doing the proper thing when we sit and wait for the onset of sepsis before removing the remains? Immediate action may avoid the danger of septicemia and save the life of the patient.

The so-called expectant plan is an easy way, and, thanks to nature, is successful in a great majority of cases; but why wait for dangerous symptoms before active interference, which may then be too late?

After radical treatment the patient is less liable to be troubled with sub-involution, hypertrophy, and displacement of the womb. The method is generally easy, and if carefully done is safe. Intravaginal injections of hot bichloride solutions should precede, and intra-uterine follow this treatment.

I have had some noteworthy results in repeated abortions from the use of chlorate of potash. In one case where the patient had aborted ten times while married to two different husbands, fifteen grains of chlorate of potassium were given three times a day; also tr. ferri chloridi, and two children were brought to term and born alive. No cause could be found in this case, but from the history and the time of the occurrence fatty degeneration of the placenta was suspected. The use of this remedy was first suggested by Sir James Y. Simpson, who employed it on the theory that an abundance of oxygen was supplied to the fetus by this means through the placental tufts. He gave it because of disease of the placenta, but also believed that it was a means of arterIALIZING the blood. He was led to the use of this remedy by the experiments of Davy and Stephens, who found that an alkaline salt when brought into contact with the blood gave it an arterial appearance. From the large amount of oxygen contained in each atom of the chlorate of potash, Simpson argued that the maternal blood would be better oxygenated, and the child's respiration be thereby improved by its administration. Anemic patients improve in color under this drug.

Alkalis are promoters of waste and assist the removal of inflammatory products. Patients who had not gained under tonics and nutrients will improve in weight and strength upon the withdrawal of these remedies, waste producers, provided their use has not been too long continued. It is a well-recognized fact that there is an excessive accumulation of carbonic acid in the presence of inflammatory changes of tissue. In the presence of carbonic acid nascent oxygen is formed from chlorate of potash, which may show how the inflammation
is relieved and oxygen furnished the fetus. It is claimed on good authority that the chlorate of potash does not part with any great amount of oxygen at the body temperature, yet there remains the fact that by increasing the alkalinity of the blood its oxydizing function is augmented. Whatever its \textit{modus operandi}, whether as a tonic or by its decomposition in the blood, thus directly furnishing an increased quantity of oxygen to the fetus through the placental tufts, or whether it puts the blood in such a state that it is able to carry an increased supply of oxygen, the clinical fact stands that it has a direct beneficial effect in properly selected cases, that is, where there is fatty degeneration of the placenta.

Shoemaker, in his new edition, recommends chlorate of potassium in placental inadequacy where there is deficient oxygenation of the blood. He gives it in 15-grain doses three times a day, thus preventing disease of the placenta, and enabling a woman to go on to term who had previously miscarried a number of times.

A very necessary method of treatment is absolute rest at the time for the recurrence of menstruation. This rest should continue as long or longer than the menses were wont to last; and complete rest in bed is sometimes necessary during the second, third, and fourth months.

The local treatment and cure of chronic uterine disease is very essential, as this and its consequences are a very frequent cause of abortion. In these cases mercury seems to have a beneficial effect, even in non-specific cases. The viburnum prunifolium here as elsewhere proves a very efficient uterine sedative.

The unfortunate doctor who is called to attend these doubtful, confusing, and tormenting cases, should derive a large amount of comfort from the fact that gentlemen who have had quite an extensive practice in this line, state that they have never lost a case from hemorrhage.

Great care should be exercised to avoid rupture of the membranes, as the expulsion of the ovum \textit{en bloc} is particularly desirable.

Early aseptic precautions are advisable, preferably the intra-uterine injections of hot solutions of bichloride of mercury. The folly of deferring these precautions until the substance \textit{in utero} begins to putrefy is attested by numerous deaths. Iodoform in suppositories doubtless has the effect of preventing further abortions.

The faradic current is of considerable value in cases of uterine inertia. It produces and intensifies contractions, eases hemorrhage, and hastens delivery. A mild current is all that is necessary, the main thing being its intermittency. In fact, a strong current is rather to be avoided, as it is prone to produce a spasm of the muscular tissue. The mild current not only possesses the above-named advantages, but also renders the patient’s suffering much less.

To prevent abortion, use opium hypodermically, \textit{per orum} or \textit{rectum}; quiet nerves, muscles, and mind. Preparations containing viburnum prunifolium have done good work in allaying uterine contractions. Tampons will often dilate the cervix and hasten delivery, but are in many ways unsatisfactory and unsafe. They should consist of iodoform gauze or absorbent cotton balls soaked in an antiseptic solution, renewed every six or twelve hours, and the patient carefully watched.

I do not use ergot until the uterus is empty. I prefer to dilate the cervix with Palmer’s steel dilators; and for removing the contents use my finger. Where this, nature’s excellent remedy, fails, Reanny’s placental forceps will be found to act very nicely, having as recommendations simplicity, safety, and efficiency.

\textbf{Obstetrics and Gynecology.}

The induction of labor pains by means of the application of electricity to the mammary gland is reported by Freund (\textit{Centralblat für Gynäkologie}). He applied the cathode to the gland and the anode to the abdomen. Five to seven milliamperes are suggested.

Galvanism in gynecology is discussed by Engleman, of Kreutznatch, in the \textit{Deutsche Medizinische Wochenschrift}. He believes that a retrograde metamorphosis in fibroid tumors is seldom had under galvanism, at least enough to show sensible diminution in size; endometritis is benefited, hemorrhage, leucorrhrea disappear, pressure symptoms are relieved, reflex neuroses
disappear, and he thinks the method of value as an adjunct to other plans.

Extra uterine pregnancy has been observed by Pinard (Le Bulletin Medecole, Aug. 19, 1891) in seven cases recently. In these cases the primary accident and functionary troubles occurred in every instance at the end of the first month. The fetus usually died before its complete development. In one case it was found of normal weight. The fetal cyst was generally immobile through adherences in the abdominal wall, possibly mobile, as in his second case, when it prevented contractions which one could attribute to the uterus. The fetal cyst always presented two apartments, one fetal and one placental. Sometimes the fetal apartment was such as to render the extraction of the fetus difficult or impossible, as in his fourth case, where decapitation of the fetus was necessary. The author thinks the benefits which accrue from a judicious surgical intervention are very great. The seven cases, together with three already reported, make ten women operated upon, with nine recoveries. The single woman who succumbed was operated upon in extremis.

A case of induced premature labor, followed by death, was reported by E. Gustav Zinke, M. D., to the Cincinnati Obstetrical Society. About one month ago the doctor induced labor in a woman, the mother of four living children. She had been operated upon two years ago for laceration of the cervix and perineum. He first saw her during the sixth month of gestation, when her abdomen was as large as it should have been at full term. Her urine was loaded with albumen, and was rather scant in quantity. There was then edema of the feet and legs. Physical examination revealed an excessively distended uterus due to hydramnios; position of the child could not be determined. During the seventh month anasarca of the entire lower extremities and continued dyspnea were very marked, and daily increased until the life of the woman was threatened. It also became evident that if the uterus were not relieved of its contents rupture of the organ might occur at any moment. She was admitted to the German Hospital, where he introduced a tupelo tent, from which he secured sufficient dilatation to permit the introduction of his finger. He then gradually dilated the cervix and separated the membranes for four days in succession with his finger. Labor not coming on, he introduced the catheter between the anterior wall of the uterus and the membranes. Painful contraction then supervened; but no progress being made after the os was fully dilated, he ruptured the membranes and found a vertex presentation of what proved to be a twin pregnancy. The pains continued, but did not effect an advance in the delivery of the presenting child, in consequence of which the forelegs were applied and the living child extracted. He then ruptured the membranes of the second child and delivered it alive, breech presenting. The mother's condition after labor was quite satisfactory. She recovered nicely from the operation and made very favorable progress for seven days, when the lochia had become colorless, the uterus perfectly contracted, and the patient herself anxious to go home. There had been no elevation of temperature at any time, nor tenderness or pain in any part of her body; her bowels had acted daily for the past five days and her appetite was good. On the morning of the eighth day she was seized by severe pain in the left shoulder-joint, extending down the arm, which could only be relieved by morphia subcutaneous. The pain was so intense as to deprive her for the time being of the use of that member. Three days later the left forearm showed a phlegmonous swelling on its extensor surface. The pain in the left arm, which had been unattended by swelling and tenderness to the touch, subsided, but with the appearance of swelling in the right forearm the temperature went up to 105°. Within forty-eight hours the inflammation had completely disappeared under the application of flax-seed poultices. The temperature was kept down by the administration of antipyrine. For two days these indications of improvement gave hope for final recovery, when she was suddenly taken ill with severe pain in the region of the liver. With the occurrence of pain in this region the abdomen became tympanitic, the temperature went up to 105°, the tongue became dry and sordid, and a low muttering delirium closed the sad scene with the death of the patient.
To make the history of the case complete, the doctor stated that, soon after the introduction of the catheter into the uterus for the purpose of bringing on labor, he was informed of the prevalence of erysipelas in the house, and to his still greater astonishment was told that it had been within the building for a week, and the patient had occupied the same room for one day. There were altogether four or five cases of erysipelas in the house, none very severe, all recovering. From the day of admission the doctor's patient received a daily bath, the parturient tract was irrigated with 1-4,000 bichloride solution twice daily. When made aware of the presence of erysipelas, the patient was taken to a distant part of the house, into a room previously thoroughly cleaned and ventilated, containing a new bedstead, mattress, with sterilized bed clothes. The patient herself, before she was admitted to this room, received another bath and complete change of clothes. When no untoward symptoms had made their appearance at the end of seven days after delivery, he began to congratulate himself on the fortunate escape from complications that might be produced from erysipelas. The lochial discharge at this time had become absolutely colorless, and was normal in character throughout her confinement. He has been not a little annoyed at the final result, and has been in a serious quandary as to how much cause of the patient's death should be attributed to erysipelous poison and the previously existing albuminuria and general debilitated condition.

Dr. Palmer said the cause of death in this case is somewhat obscure, but it was probably due to sepsis, and the cause of sepsis was seemingly due to the presence of erysipelas in the hospital. The only point of criticism he had to make concerning the management of Dr. Zinke's case was the manner in which the premature labor was provoked. The induction of premature labor was clearly justifiable and judicious, and had the method which was last employed been utilized at first it seems probable to him that all cause of local, then general, sepsis might have been avoided. The repeated examinations with the finger, then the tent to induce dilatation, were always objectionable.

In a considerable experience in the induction of premature labor he had invariably used the bougie, far preferable because less septic than the male catheter. He had never known it fail to produce uterine contraction in less than twelve hours. Once a medium-sized one failed to produce sufficient contractions, and he deemed it prudent to withdraw it and insert a larger bougie in another place. The bougie may be said to be a safe, prompt, thoroughly efficient provocative of uterine contractions, stimulating normal uterine action in the first stage of labor. The finger and tents he did not utilize.

CINCINNATI.

Societies.

CLINICAL SOCIETY OF LOUISVILLE.

Stated Meeting, April 5, 1892, the President, Dr. P. Guntermann, in the chair.

Dr. J.W. Irwin: I bring before the Society to-night a patient that does not look at all sick, as you will observe. This gentleman, fifteen years ago, had a small sore on his penis, which was diagnosed by the physician who attended him at the time as a soft chancre, which healed up rapidly. He first came under my observation on the 8th day of August, 1890. He was then suffering from pharyngitis, with induration of the soft palate. There were no evidences of constitutional disturbance, no enlarged glands and no eruption of the skin.

The throat was not ulcerated, but from its appearance and the indurated condition of the soft palate, I gave the opinion that the trouble was syphilitic, which opinion was not concurred in by the patient. He remained under my treatment until about the 19th of November, 1890, when the throat trouble had yielded to specific medication, and then passed from under my observation until early in the spring of 1891. During the interim from the time I saw him until he returned he had a series of experiences, which he can tell for himself. Soon after his return I was called to see him, and found him suffering from partial hemiplegia and severe hemicrania. I made a further examination, and found that he had nodes on the clavicle and sternum, and there were evidences of similar deposits within the
skull; vision was imperfect; a supra-trachlear gland had suppurated. He had gained in flesh and in strength under the treatment I had given him, still he was not satisfied, and sought advice elsewhere. His sight grew worse; and, as it did not improve under the treatment he received here, he went to Chicago and there consulted an ophthalmologist, who told him that he would never regain his sight; he was now entirely blind and had to be led. He then went to Milwaukee and sought the advice of a prominent specialist, who told him that he thought he had about one chance in a thousand of regaining his sight, but he would not undertake the case unless he could remain with him a year. Very much discouraged and blind, he then returned to Chicago and put himself under the care of another physician, who concurred in the diagnosis that I had made and prescribed similar remedies. He came under my care again on the 29th of December, 1891. I found him taking 125 drops of a saturated solution of iodide of potassium three times a day, and his sight had improved enough to enable him to find his way without assistance. I advised that the dose be increased to 150 drops, and the improvement continued much more rapidly. As the dose was well borne, soon after I advised that it be increased to 180 drops. Meantime he had gained in weight under these enormous doses from 180 pounds, when he commenced the treatment, to 267 pounds. One eye is now so far improved that he can see to read, and he can see his hand when passed before the blind eye.

The peculiarity of this case was in the difficulty of diagnosis at first. The induration of the soft palate which would not yield to treatment led me to believe it was a case of syphilis, notwithstanding the fact that there was nothing in the history indicating that he had contracted the disease. Then, when the supra-trachlear gland became inflamed, I was more than ever convinced that it was syphilis. Finally, the appearance of nodes and trouble with his eyes pointed unmistakably toward syphilis.

Dr. W. O. Roberts: What effect did the iodide of potassium have upon the kidneys? Did it increase the flow of urine?

Dr. J. W. Irwin: I did not notice any change. He is taking now 180 drops three times a day. The stomach seems to stand the dose very well.

Dr. W. O. Roberts: This shows that large doses of iodide of potassium can be given in these cases. There are several members present who are well acquainted with a patient, but not with the treatment that I will mention in connection with the case reported. It was a young man who had syphilis, and had every evidence of involvement of the brain. He was treated by Dr. Bodine and myself, and we gradually increased the dose of iodide of potassium, as done in the case related by Dr. Irwin, until the patient took one half ounce (240 grains) three times a day. We noticed, after giving these large doses, it produced most copious diuresis, the patient passing enormous quantities of urine. His symptoms yielded to the treatment, then the dose was gradually diminished. I do not remember for what length of time the enormous doses were continued, but for a long time. It has been fifteen or sixteen years, and there has been no evidence of syphilis since then.

Dr. T. Satterwhite: I have often spoken of the case referred to by Dr. Roberts as the criterion for large doses of iodide of potassium. Dr. Pusey and myself had a case, several months ago, in which there was cloudiness of the cornea and total loss of sight of one eye. It never yielded to any treatment except large doses of iodide of potassium; he took about 200 grains a day, and has improved ever since. His restoration to sight is progressing; he is now able to tell the number of fingers you hold up. I believe in large doses of iodide of potassium in syphilitic diseases.

Dr. J. A. Ouchterlony: I was very much interested in the case, especially because of the obscurity of the diagnosis. We all know, especially in cases of syphilis, where there are early symptoms we may expect various secondary troubles later on. While toleration of large doses of iodide of potassium may be an evidence that it is a syphilitic trouble, still I do not think the opposite will hold good. One does meet occasionally with syphilitic patients who cannot tolerate iodide of potassium; these
are exceedingly troublesome cases. I have one of that kind under my care at the present time. In it there is a history of syphilis, with very marked early secondary symptoms, and three years later extensive glandular enlargements, sufficiently characteristic of Hodgkin's disease to make it a little doubtful whether the patient did not have that. The blood was examined, however, and found to be perfectly normal with the exception of a slight diminution of hemoglobin. In this case, which was undoubtedly syphilitic, doses of sixteen grains of iodide of potassium three times a day gave rise to such unpleasant effects that it was necessary to diminish the dose. I believe in this case a sojourn at Hot Springs would do good. Possibly we could get beneficial results by carrying out a "Hot Springs" treatment as well as practicable at home; for instance, large doses of silurian water, and a Turkish bath three or four times a week. Under such circumstances I think we could make persons who are intolerant of full doses of iodide of potassium take large doses, when ordinarily they would not be able to do so.

Dr. W. O. Roberts: Have you ever used digitalis in connection with the treatment of syphilitic cases?

Dr. J. A. Ouchterlony: Never, unless there were evidences of cardiac disturbances with it.

Dr. A. M. Vance: I was surprised that Dr. Irwin did not say anything about giving his patient mercury. I do not believe that the tolerance of large doses of iodide of potassium is proof of syphilitic condition. I have seen a number of cases, like the one Dr. Irwin described, that have responded after long treatment with iodide much better when mercury was added.

Dr. W. C. Dugun: I have read of a number of cases of syphilitic nature where calomel was used with very gratifying results.

Dr. W. Cheatham: I understand that mercury can be given by the skin with beneficial results, in cases of syphilis, where patients are unable to take it by the stomach.

Dr. J. W. Irwin: I hardly thought it necessary to go into details concerning the treatment of this case, but remarks would indicate that something on this subject may be said.

When this gentleman came under my observation with pharyngitis I could get no history of syphilis, and when I approached the subject he denied having had any thing of the kind, even the sore. I informed him that I thought he had syphilis, and there was no doubt in my mind that the condition of his throat was syphilitic. The throat trouble would yield to no treatment until I commenced the use of mercury. I gave him mercury by the mouth with very little effect. I then used the method of Lewin and gave injections of one sixth grain corrosive sublimate hypodermatically, which caused the induration to melt away like snow. I continued this treatment every second day until he had received sixteen hypodermatic injections of one sixth grain of corrosive sublimate. I might say that the corrosive sublimate produced a very decided effect upon him; it caused vertigo to the extent that he would have to lie down for about half an hour after each injection. Then his skin would become of a healthy pink color and normal feelings would return to him. Now, one word in regard to the use of iodide of potassium: I have never treated a case of constitutional syphilis, depending upon iodide of potassium alone, with the hope that the patient would remain permanently well. There is but one thing, in my opinion, that will cure syphilis permanently, and that is mercury. Under the use of mercury combined with iodide of potassium, or given alone, I think we may expect the most beneficial results.

Dr. J. A. Ouchterlony: At a meeting of the Society, some time ago, a case of intestinal diverticulum was presented, which interested me, and in looking over some of my foreign journals in connection with this subject I came across a case that I shall be glad to read. It is a case of diverticulum of the esophagus:

"Mattie B., age forty-one years. She was admitted to the Seraphim Hospital, Stockholm, on the 24th of July, 1890. Father died, at the age of fifty years, of inflammation of the lungs; her mother died about the same age of consumption. Three brothers and sisters are still living, two are in good health, one suffering from rheumatism. Four have died during infancy. One sister died at nineteen years of
age in parturition. The patient had been married twice; her first husband died, four years ago, of consumption, after suffering many years, and in this way causing her a great deal of care and trouble. She had had three children, of which the first is still living and in good health; two died about three years of age. During childhood the patient had whooping cough, measles, diphtheria, and at the age of twenty she had a severe attack of typhoid fever, and somewhat later an attack of muscular and articular rheumatism. At times she has been suffering from a cough, but has never had any more serious chest trouble. No disturbances of the digestive organs have been observed. Menstruation has been regular, but somewhat abundant. Four years ago she was admitted to the hospital on account of intestinal hemorrhage. Her last pregnancy occurred thirteen years ago. The hygienic surroundings under which she lived were right good, save that during the last winter she occupied a somewhat damp dwelling. Since about six years ago she suffered from time to time with palpitation of the heart, which occurred in paroxysms, without any previous exertion or well-developed cause. In May, 1890, she began to cough, expectoration was abundant and rather thin, without any admixture of blood; simultaneously she began to have a cardiac uneasiness, and there was also burning sensation in the left scapular region. By midsummer, on account of further severe cough and debility, she was compelled to take to her bed, which she has never left since then. She now began to suffer from a sense of oppression in the throat, as if about to suffocate, by a spasmodic contraction of the muscles of the neck. She suffered from constant dryness of the mouth and throat, but there was no difficulty in deglutition, and no swelling of the neck was observed while at her home. Her strength diminished and she seemed to have become considerably emaciated. Cough continued the whole of this time, which was rather harsh and barking, without any real hoarseness, nor was there any considerable dyspnea. At the time of admission to the hospital the patient complained of great fatigue, and difficulty in expectoration, with sense of suffocation and constriction in the neck. Cough very severe, occurring in longer or shorter paroxysms, during which breathing was quite difficult. There was constant sensation of dryness of the mouth and throat, and besides this she complained of pain in the right arm, and also pains here and there in the muscles of the chest. The patient, meantime in bed, showed a preference for position on the right side or on the back; nutrition was bad; countenance pale; sleep disturbed by cough; appetite poor; bowels sluggish; no tremor; pulse eighty to the minute, regular and full; urine normal; temperature afebrile. Her voice was not markedly hoarse; no difficulty in deglutition; expectoration abundant, amounting to about four cuspidors per twenty-four hours." (These cuspidors are little cups, kept for the convenience of the patient in bed.) "It consisted of a colorless, watery, frothy fluid, which contained a considerable quantity of mucus, but no yellow elastic fibers or tubercular bacilli. In the lower part of the neck appears a swelling of half the thyroid gland, the right lobe being larger than the left. In the right supra-clavicular fossa there are some large infiltrated glands; in the left supra-clavicular fossa there are a number of smaller similar glands, one of them somewhat tender under pressure. Upon laryngoscopic examination it was found that the right vocal cord was immobile during intonation, abduction movement during inspiration absent; the left vocal cord was perfectly mobile. Over both lungs were heard moist râles and ronchi, but no dullness anywhere. Nothing abnormal was noticed in regard to the heart or abdominal organs. August 9th: The difficulty in respiration has increased. When a laryngoscopic examination was about to be made, the patient was seized with such alarming dyspnea that tracheotomy seemed imperative, and she was transferred to the surgical ward, where this operation was immediately performed. No marked improvement in regard to the dyspnea was effected by the operation. August 23d: To-day she was returned to the medical section. August 29th: The canula was removed and respiration performed quite well without it. August 31st: During the past night the patient was suddenly seized with a severe attack of dyspnea; blood
poured abundantly from her mouth; she herself endeavored to open the wound in the trachea. When the physician arrived the canula was inserted, but she died almost immediately.

"The autopsy demonstrated as follows—it took place on the first of September, 1890: After opening the pharynx and esophagus the mucous membrane was found to be the seat of a tumor, which rose to the height of between three and five millimeters, and extended from a level with the larynx down about seven centimeters; it surrounded the whole pharynx in an annular manner, becoming narrow upward and toward the lower end, leaving the posterior wall and downward over portion of the anterior wall free. The surface of this neoplasm is of peculiar formation, consisting of small nodules; these nodules are of greenish-white color, and very firm to the touch. On a level with the lower portion of the neoplasm was found, on the right lateral aspect of the esophagus, an opening, which was about the size of the little finger, with rather smooth, grayish-red margins, which orifice opened into an elongated, perfectly encapsulated excavation, filled with dark, dirty, reddish colored fluid contents. This measured in length about seven centimeters, and in width between four and five centimeters. Its walls throughout its whole extent covered with numerous closely adjoining small nodules, which are most variable in appearance, roundish, elongated, pyriform, club-shaped, etc., some of them quite slender; others project into the excavation, having the form of polypi hanging by one or more quite slender stalks. These excrescences are of light, grayish-red color, and quite firm. The walls including these excrescences have a thickness varying from three to nine millimeters where this sack-like formation projects between the esophagus and trachea, and to the right of them. It is situated behind the sheath of the vessels, and reaches upward to the middle portion of the thyroid gland, both lobes of which are somewhat hypertrophied. In the upper anterior portion is a rupture about eight millimeters in diameter, through which it communicates with the trachea. In the lower part it is adherent to the apex of the right lung over a surface, I suppose, about the size a five-cent piece. Upon incision into the lung this formation is well defined and distinct from the adjoining parenchyma, which in the immediate vicinity appears somewhat firm and indurated. As regards the changes in other organs nothing need be mentioned, save that the trachea and bronchia were filled with a dirty, reddish fluid, like that in the cavity just described, and in both lungs were found numerous small recent hemorrhagic foci, without any indication of inflammatory irritation apparent in the surrounding area. Microscopical examination shows that both the tumor in the pharynx and the excrescences in the above described sacculated formation had the structure of caneroid. It is very certain that the excavation communicating with the esophagus and trachea is to be regarded as a pre-existing diverticulum of the esophagus, which had become the seat of caneroid formation.

"According to Zenker and Ziemssen the present case should be designated as a pulsion diverticulum, which is of considerable interest because of the secondary changes which have arisen by neoplastic formation in the mucous membrane lining it, and also on account of its unusual situation in the anterior portion of the right lateral wall of the esophagus. Usually pulsion diverticula are situated in the posterior wall between the pharynx and the esophagus. The very considerable dyspnea which had more and more developed during the patient's stay in the hospital, and which led to the performance of tracheotomy, was not satisfactorily explained by the paralysis of the right vocal cord; and, as no material improvement was obtained by means of the operation, it was quite apparent that some other respiratory difficulty must have existed. The case is one in which we have to look to the pressure upon the trachea by the enlarged thyroid gland, but this was but very moderate. The pathological processes in the esophagus which were present did not give any well-marked symptoms during life. The patient never complained of difficulty in swallowing, and there never was any evacuation of the diverticulum contents by the mouth. The esophagus was not sounded, as there was no inducement to adopt this pro-
ceedure, and possibly such a manipulation might have hastened the final catastrophe, the rupture of the diverticulum into the trachea.”

I have never seen a case at all like this. I have never seen a case of diverticulum of the esophagus; but upon general pathological grounds I am not surprised that, when such a formation takes place, it should become later on the seat of a malignant growth; a tendency to the development of malignant formations in a number of analogous conditions is quite common. I remember that, a number of years ago, I saw a patient who had an incarcerated testicle in the inguinal canal; the testicle had never descended. Upon working up the subject I found that a German surgeon in Breslau had collected a large number of such cases, and found a large proportion of them had terminated in malignant growth. Under certain circumstances morbid conditions involving chronic irritation are likely to develop malignant disease. A very good illustration of this is the tendency to development of malignant diseases of the liver in connection with the protracted irritation from gall-stone.

I have to report two cases of pneumonia in which the most remarkable feature was the mode of death. I saw the first one in consultation, probably in 1874. It was a case of right-sided pneumonia, the patient getting along remarkably well until the fourth day. He was propped up in bed, and was in the act of eating some oyster soup, when all of a sudden he fell back dead. I think both of these were cases of heart clots. It is not likely that there was sudden cardiac paralysis, because there was no evidence in either case of great cardiac asthma. The appearance was good in both the man and in the woman. There was not great rapidity of the pulse; in fact there was nothing to indicate danger in that direction other than that which is always present in every case of croupous pneumonia. It is a rare termination of this disease, and I think it is a danger that we ought always to have before our eyes in the treatment of such cases. The occurrence of heart clots is due, first, to the well known excessive hyperosmosis that is always present in this disease; secondly, to the overaction of the heart, which naturally leads to cardiac fatigue, if nothing more.

Dr. W. H. Wathen: Referring to the case reported by Dr. McMurtry at the last meeting, a short résumé of which has been given here this evening, it has been my experience that frequently in these cases there are severe pains in one or both legs, and I have had cases where the nutrition of both limbs was much impaired, with cold, clammy perspiration, where but one side of the adnexa was involved. But generally these disturbances occur in the leg on the side where the tube or ovary is diseased, and they are various, probably sometimes with symptoms of hysteria-neurosis, which will explain the drawing up of the leg in the case reported. These troubles often occur where there is nothing more than simple adhesions which are easily separated, as in the case described, with no pus or hard exudate. There is no way of curing these cases except by surgical interference, and the results are very gratifying. It is the safer plan, to get permanent results, to fasten the uterus in front by some of the methods devised for that purpose. Formerly to accomplish this I have used a silver wire, which I do not intend to use again. I will substitute kangaroo tendon and fasten the round ligament and broad ligament to the parietal peritoneum on each side of the abdominal incision. This is the safest and quickest method, and there is no trouble resulting from it. You might probably do a more artistic operation by suturing the broad ligament and round ligament to the an-
terior surface of the uterus, thereby shortening these supports so as to hold the uterus in its proper position. It is bad surgery to attempt to separate the adhesions and replace a retroposed uterus without doing an abdominal section. It does no good, and it may do much harm, or cause the death of the patient. There may be small cavities of pus in the pelvis that no laparotomist is able to diagnosticate until the abdomen is opened, which forcible efforts at replacement might rupture and kill the woman. Adhesions can not be separated by this method, and a laparotomy will finally have to be performed. I have dilated the womb frequently, and my name is very widely known in this connection, because of an instrument I devised some years ago for this purpose, and which is now manufactured and used in this country and in Europe. I have never caused peritonitis by dilatation, but have learned that peritonitis often follows dilatation in the practice of some physicians, even when dilatation is not carried to any considerable extent. I have under treatment a patient with a pus cavity emptying into the rectum, caused by dilatation of the cervix by one of our prominent physicians. I do not think that dilatation of the womb, either extensive or moderate, is justified if there are any adhesions.

I will report a case I treated about four or five weeks ago, with unusual reflex troubles. Her physician had been giving her three quarters of a grain of morphia and one fiftieth grain of atropia three or four times a day hypodermatically. She would get nervous, and her pulse would increase in frequency and gradually run up from 80 to 140 per minute; her face would get as red as the blush of scarlet fever; around her neck the skin would be perfectly white; on her arms and body there would be spots two or three inches in diameter, the color of the face and the skin separating them would be absolutely bleached. In other words, on parts of the surface of the body there was paralysis of the capillaries, with capillary contraction in the intervening spaces. This would last from two to five hours, coming on sometimes twice daily. I removed an embedded broad ligament cyst and separated extensive tough adhesions. There was considerable bleeding, and a drainage-tube was used for two days. She had no untoward symptoms from the operation, her pulse and temperature remaining normal. After the operation there was no recurrence of these blushes until two weeks ago, when a friend slipped and fell, striking with her arms upon the abdomen of the patient. The shock caused severe pain, and the morphia, which had been reduced to about one eighth of a grain per day, has since been increased to from one quarter to one half grain daily. Her reflex disturbances have returned, but her pulse has not gone above 115 per minute. It may be necessary to do another laparotomy and remove the ovaries and tubes, which were separated from adhesions and not removed, because not badly diseased.

L. S. McMurtry, M.D.,
Secretary.

NEW YORK ACADEMY OF MEDICINE.

Section in Pediatrics.—Stated Meeting, April 14, 1892. Dr. W. P. Northrup, chairman.

Dr. Mary Putnam Jacobi reported a case of persistent ulcer in a girl of four years. Upon admission to the hospital there was an immense ulcer on the right thigh, covering its entire anterior and external surfaces from the trochanter to the knee.

This had originated seventeen weeks before from a burn caused by matches which had taken fire in the child's pocket. It was extensive at first and had steadily increased in size, except at the lower portion where some reparative process had taken place. Owing to the irritability of the child it had been neglected, and on admission was covered with a thick grayish slough. There was considerable fever, the temperature ranging from 102° to 103°.

Irrigation with a saturated solution of boric acid and the use of zinc ointment and a powder of salicylic and boric acids was followed by disappearance of the fever, the surface of the ulcer assuming a better character. A number of skin-grafts were made, four of which were successful. Sponge-grafts were applied unsuccessfully. After four weeks' treatment the ulcer measured four and one half inches by three and one half inches.

Although the grafts grew to be an inch in
diameter the ulcer steadily increased in size until it became six and one half inches long. At the same time it assumed a grayish look, the entire appearance being that of a syphilitic ulcer. Under a dressing of mercurial ointment it again became healthy. Iodide of potash was given internally, and for a time apparently with the best of results. Improvement then ceased, and the ulcer again assumed an unhealthy look. Bichloride of mercury was then added to the treatment (two and one half months after the date of admission), and from that time improvement continued without interruption and the ulcer had closed in six weeks—eight months from the date of injury.

The child showed no evidence whatever of syphilis, but there was no permanent improvement until anti syphilitic treatment was instituted. The series of relapses was only arrested when the bichloride was added to the iodide of potash and iodide of iron.

It was suggested that this did not necessarily mean that the ulcer was syphilitic in character, for treatment by iodide failed. It is quite possible that the mercury administered with iron acted as a tonic. The obstinacy of the ulceration might be due to the fact that the original ulcer was caused by matches, burns by phosphorus being noted for their obstinate character.

A membranous cast of the trachea was presented by Dr. S. K. Bremner, resident physician of the New York Infant Asylum. The patient, a girl seventeen months old, had been suddenly seized with symptoms of laryngeal diphtheria, which had become progressively worse. Intubation was performed sixteen hours after the onset, dyspnea being the most urgent symptom. A one-year tube was used and was at once coughed out. Before another tube could be introduced, and during a violent paroxysm of coughing, a complete cast of the trachea was expelled. A three-year tube was then introduced and all dyspnea and cyanosis was at once relieved. Quiet sleep followed, the child took her nourishment and stimulants well, and at that time, twelve hours after the intubation, the symptoms were all improved.

Dr. Joseph O’Dwyer, being unable to be present, presented through the chairman a case of supposed sarcoma of the kidney. The patient was a girl three years and ten months of age. She had been under observation but a short time and the history was uncertain. There were no symptoms referable to the growth, and as yet no impairment of nutrition. A large, firm mass could be felt in the left side of the abdomen just below the line of the umbilicus, and could be distinctly seen when the child was upon the back. Posteriorly it could be detected in the lumbar region, and upon making pressure forward the whole mass could be felt to move freely.

It was slightly nodular and hard and tense to the feel. It seemed to cause no discomfort or pain, and was not sensitive to pressure. The urine contained a few blood cells and broken, granular and hyaline casts. It was beyond doubt a kidney tumor, possibly a carcinoma. Carcinoma is, however, rare at this age, while sarcoma, if not common, is the most frequent kidney growth.

The speaker referred to a specimen presented the night before at the New York Pathological Society by a member of this Section, Dr. L. Emmett Holt. The patient was two years of age. A tumor had been discovered in the right side five months before. There was but little impairment of nutrition and no definite symptoms. A diagnosis of sarcoma had been made and confirmed by operation. The growth weighed two and a quarter pounds, and was removed by lumbar incision. One week after the operation the patient was doing well.

But one result could be expected in the present case without operation. The mass would increase in size and the child would waste and die.

A paper on the Practitioner’s Anatomy of the Respiratory Passages as Applied to Intubation, Laryngotomy, Tracheotomy, and Bronchotomy was read by Dr. James E. Kelly, and was illustrated by numerous charts and diagrams and by several elaborate fresh dissections of the thorax and throat, both in children and adults, made especially for this occasion. These added greatly to the interest of the paper, which was designated as a practical application of the author’s extensive experience and observation as an anatomist to the needs of the general
practitioner. Especial attention was given to
the mechanical view of the subject as being of
far more value than the vast amount of detail
to which the student is treated without a clue
to its practical application.

The anatomy of the child varies but little
from that of the adult. The thymus is the
only structure that causes important modifica-
tion in the region under consideration. In op-
erating low down in the pre-tracheal space in
young children it causes serious obstruction. It
varies greatly in shape, and is subject to num-
erous anomalies. It usually forms a body extend-
ing entirely across the space between the sterno-
mastoid muscles. Two processes pass upward
in close apposition to the tracheal fascia, and
terminate within half an inch of the isthmus
of the thyroid to which they are attached by two
ligamentous bands. Hence but a limited por-
tion of the trachea is uncovered and available
for operation below the isthmus of the thyroid.
This latter body is occasionally absent and
sometimes in an abnormal position, conditions
which may be very puzzling to the operator.

It should be remembered that it is possible
to make a dissection in this region as neatly
and almost as bloodlessly in the living subject
as in the cadaver. This is especially true in
young patients. The more closely an operation
resembles a dissection the more satisfactory it
is to the surgeon and the safer for the patient.
Haphazard surgery is a lottery in which fools
play for their patient's lives.

In considering the anatomy of the region the
relations of the osseous structure are of much
importance. The posterior surface of the lar-
ynx and trachea corresponds and adapts itself
very closely to the contour of the centerior sur-
face of the spinal column. The esophagus and
lower portion of the pharynx, which occupy
but little space, are the only structures between
the trachea and the vertebræ. Thus the laryn-
go-tracheal tube, passing downward and back-
ward, intersects the place of the sterno-mastoid
muscles. This is a point of much practical im-
portance in low tracheotomy.

Laryngotomy is an operation so undesirable
that it merits but little attention. It opens the
larynx just below the rima glottidis, where the
canal is narrowed into a wedge, the thin edge
being anterior. The cartilage is rigid and of
such low vitality that the injury resulting from
the separation and the introduction of a tube
is liable to be followed by necrosis. There
being but little subcutaneous tissue, an unsight-
ly scar usually results, which lies so high
that it can not be concealed.

The hybrid operation, laryngo-tracheotomy,
is unjustifiable, as it destroys the continuity of
the cricoid cartilage upon which the larynx
largely depends for its shape.

Much vagueness and uncertainty exists re-
respecting regard to the anatomy of this region. It should
be remembered that all the external operations
on the respiratory passages are performed be-
tween the hyoid bone and the sternum, in the
mesial line between the sterno-hyoid and sterno-
thyroid muscles, low tracheotomy alone being
done below the isthmus of the thyroid.

Not an important structure lies above the
isthmus, but below there are numerous impor-
tant vessels. This lower space is analogous to
a space just above the pubis. Two spaces are
formed by two distinct layers of fascia, which
are fused above the isthmus to form a single
fascia. In the superficial space are the anterior
and transverse jugular veins and a few small
arteries. In the deep space are the left immo-
inate, the inferior thyroid, and a venous plexus.

Much interest has lately been aroused in the
operation of bronchotomy for the removal of
a foreign body from a bronchus. The author,
after extensive investigation, is inclined to think
that the operation is justifiable, and that there
is no insuperable anatomical difficulty in the
way. The cordate shape of the chest places
the root of the lung much nearer the surface
than is usually supposed. A ventricle incision
should be made through two or more costal car-
tilages, or through the ribs just internal to the
mammary line. This readily brings the structur-
es into view, the relations of which are very
close and intricate. While the mechanical dif-
ficulties are great, a still more important ques-
tion is the possible effects of interference with
the heart and great vessels. Upon this point
little or nothing is known.

While intubation requires but little anatomical
knowledge there are certain points which are
quite essential. The point of the tube may
enter numerous depressions and fossæ preventing its introduction. The first are the glossopharyngeal fossæ, separated from each other by the frenum of the epiglottis. The glottis itself is situated in the midst of soft, yielding tissues which are easily indented.

A slight depression exists just above the false vocal cords, which may readily catch the tube. The lateral ventricles of the larynx are, however, the source of most serious trouble. These ventricles lie upon either side between the true and false vocal cords. The true cords, especially in phonation or stridor, approach more closely to the mesial line than the false, thus forming a cavity with a concave floor, in which the end of the tube is very easily entangled. Just behind the glottis, and separated from it by the arytenoid bodies, is the lower portion of the pharynx, the most capacious snare set for the operator, and the one into which he most frequently falls. This whole area in the infant is readily covered with the tip of the index finger. The surface of the glottis is, moreover, very oblique to the pharynx, so that the tube easily glides backward into that cavity. Unless the true cords are accurately reached the point of the tube is deflected into the capacious and yielding ventricle.

The operation can therefore be performed with facility only when the tube is held parallel with the mesial line of the body, but obliquely to the long axis of the rima and with the point directed toward the inferior margin of the cricoid cartilage. This can be effected by introducing the instrument into the mouth with the handle over the bicuspid tooth, with the point of the tube directed forward toward the glottis. The common error is thus avoided of passing over the epiglottis. Owing to the more extended area opposed to the ventricles the tube is not so liable to be caught in them. As the surface of the larynx containing the glottis does not look upward, but almost directly backward, the handle of the introducer should be elevated to bring the point of the tube forward.

In young children the epiglottis is sometimes so soft and small as to be found with great difficulty. Pass the finger low into the pharynx until the resisting cricoid cartilage is felt, on the upper margin of which are situated two movable nodules, the arytenoid cartilages. Immediately above and in front of these in the mesial line is the epiglottis.

Dr. H. D. Chapin said that he had performed tracheotomy several times upon children under two years, and had been surprised at the extreme obliquity of the trachea, which caused it to lie at the great depth at the lower portion. This was a strong argument in favor of intubation in young children instead of tracheotomy.

The chairman asked Dr. Kelly what point he regarded as the narrowest in the respiratory tract.

Dr. Kelly replied that he believed it was at the true vocal cords.

The chairman referred to experiments upon the dead subject by Dr. O'Dwyer and himself, which proved that the narrowest point was not at the cords but at the cricoid cartilage. An intubation tube could frequently be drawn with the use of but little force downward past the cords, which could not be made to pass below the cricoid. A tube much smaller than the prescribed size might drop below the cords, but would not pass below the cricoid into the trachea. The most recent modification of the tube, approved by Dr. O'Dwyer, consisted in making the lower end bulbous in shape and equal in size to the largest part of the tube. This would prevent its entering the ventricle of the larynx, which is a very frequent source of failure.

Dr. Berg asked if the operation for bronchotomy could not be done to better advantage posteriorly.

Dr. Kelly replied, that if the tube were turned to the side as far as possible during intubation it would bring the long diameter in position to act as effectually as the bulb described. The posterior operation was impossible because of the closer apposition and less yielding character of the ribs, requiring extensive resection. The trunks of the intercostal vessels were also met posteriorly instead of the branches.
CINCINNATI OBSTETRICAL SOCIETY.

Stated Meeting, April 1, 1892.

Dr. Rufus B. Hall reported two cases and exhibited specimens of pus tubes.

Case 1. Mrs. K., age twenty-three, married five years; one child four years old. Three years ago she had an attack of pelvic inflammation following a vaginitis, and afterward had a painful point over the left ovarian region. She has had three other attacks of abdominal inflammation, the last commencing seven weeks before the operation was made, which kept her in bed most of the time. She had a temperature for the last weeks of her illness indicating septic infection. I was asked to see her with her family attendant, Dr. H. W. Rover, January 19th, when an examination revealed that the uterus was fixed in the pelvis with a firm, well-defined swelling, the size of an orange, to the left, which was sensitive to pressure, with marked tenderness on the right side of the pelvis. The patient was growing worse under the best medical treatment. The operation was advised, and was done January 24th at my private hospital, and this large pus tube with the corresponding ovary removed. It is now twenty-five days since the operation, and the patient is able to leave the bed for a short time, and will soon be able to go home. She did not have an easy convalescence, and had some fever as late as the fourteenth day after the operation, which, however, I attributed to her pre-existing sepsis.

Case 2. Mrs. S., age twenty-six years, married eight years—three children, the youngest two years old—has had some pelvic difficulty since the birth of the last child. In June, 1891, she had the first attack of abdominal inflammation, and has been confined to her bed almost constantly since. I saw her first with Dr. Rover, February 10th, and the operation was performed six days later at the Cincinnati Free Surgical Hospital for Women. When an examination was made it was found that the uterus was fixed, and a well-defined mass upon either side of the pelvis. Both tubes were occluded, and were firmly adherent. I have not opened the distended tubes, but will proceed to do so in your presence. As I lay them open you will observe that they both contain pus. The operation was done two days ago. It is too soon to say what the result will be, but I believe she will recover.

Dr. Hall said he did not like to operate while the patient was suffering from sepsis, nevertheless there were cases in which the surgeon felt that there was nothing else to be done. Even if it did not promise so much for the patient as the same operation would if they did not have sepsis, yet it promised all the hope they had of recovery, and many of the cases recovered after the operation was made. We must admit, however, that the chances are not so good as the cases in which there are no manifestations of sepsis before the operation. If the sepsis is due to a pus tube, and that can be removed without difficulty, they usually recover promptly and permanently.

E. S. M.

Correspondence.

LONDON LETTER.

[From our Special Correspondent.]

The Royal British Nurses Association; Dr. Sedgwick Saunders and Adulteration of Food; Inaugural Address by Professor Simpson; Apolit; Study of Inebriety; A Munificent Gift; Report of the Paris Pasteur Institute; A New Medical Knight; Report of the Committee on Color Vision.

The draft charter of the Royal British Nurses Association was discussed by a large gathering of doctors from various parts of the kingdom assembled at Exeter Hall under the auspices of the General Practitioners Alliance. Though some of the hospitals are known to be opposed to the charter, a resolution in favor of the incorporation was carried unanimously.

Princess Christian, to whom the association is really due, is supported in her application for a royal charter by Sir James Paget, Sir Richard Quain, Sir Henry Thompson, Sir Spencer Wells, Sir James Crichton Browne, and other eminent medical men.

The Public Analyst of the city of London complains that no improvement is shown in the action of the public respecting the advantages to be obtained by their taking the initiative in submitting samples for analysis, and the act
would have remained a dead letter in the city if he did not continue to employ inspectors to collect samples for analysis. This peculiarity is not confined to the city, for of 27,465 samples analyzed during the past year by public analysts throughout the kingdom, all but 107 samples were obtained by officers of local authorities. It does not therefore look, thinks Dr. Sedgwick Saunders, as if the public were dissatisfied with the quality or genuineness of the food or drugs supplied them by retail dealers. Ever since the passing of the first act in 1875 there has been a steady diminution in the percentage of articles examined and found adulterated by public analysts. Thus in 1875 the percentage was 18.10 for the whole kingdom, whereas in 1891 the proportion was 11 per cent. During the past year the result afforded by the analysis of milk is found to contrast fairly well with those of previous years; and although some samples which were returned genuine were not above suspicion, the differences were not sufficiently marked to warrant legal proceedings by reason of the difficulty of accurately defining the limits shown by milk from poor, ill-fed cows and that which had only been slightly watered. On these grounds Dr. Saunders is of opinion that the analyst who prosecuted for added water to the extent of only five per cent incurs a grave responsibility. The fines imposed in various parts of the kingdom in such cases varied from one penny to one shilling, and in two cases a shilling fine was thought sufficient where the milk had been diluted with twelve and twenty-six per cent of water respectively.

Professor Simpson, the President of the British Gynecological Society, in his inaugural address traced the development of gynecology as a separate department from obstetrics. Speaking of conjugal relations, he said statistics showed that the condition of celibacy was not favorable to health. According to Bertillon, mortality was decidedly higher among bachelors and widowers than among husbands, the same proportion holding good among females. Love and motherhood, in the salutary conditions of marriage, far from exhausting the vitality, preserved and protected it in the present and the future. Commenting on the various forms of sexual union, it was shown that the birth-rate was lowest with free love or communal marriage, and highest with monogamy, the latter form thus constituting one of the surest guarantees for the maintenance and multiplication of the race. Dr. Simpson showed that within a month of birth the mortality among illegitimate children amounted to 170 per 1,000 and among legitimate 74.7 per 1,000. With regard to the marriageable age, he found that the mortality of married males before the age of twenty was very high. After this age marriage exercised a favorable influence. The danger of early marriage is not so pronounced with the female, but still it is unfavorable under the age of twenty. Scrofula, idiocy, tuberculous diseases, physical deformities, weak mindedness, and deficiency of energy and courage were the most common ailments in the off-springs of immature parentage. Few of the children lived past middle age, many of them becoming insane and criminal. As to the physical bars to marriage, the President particularly enumerated malformations of the generative organs and heart disease of a pronounced type, insanity, epilepsy, drunkenness, and idiocy. He urged the necessity, not of many children, but of a moderate number, who were more likely to be healthy. With this view he suggested temperance on the husband and wife—an ethical rather than a mechanical preventive. Were these laws obeyed, a race might be evolved that would never need the aid of gynecology.

Attention is being called to the active principles of parsley, and a recent contribution to the Therapeutic Gazette says that in modern as in ancient times this plant has enjoyed a certain reputation as a carminative, diuretic, aphrodisiac, and emmenagogue. Apiin and apiol are said to be the two substances which arc the really active principles of parsley. Experiments have been made this year with a number of different products isolated from the plant in question. It was found that the crystallized apiol is the most poisonous of all, but it is absorbed with the greatest difficulty, and in consequence is not available for therapeutic purposes. Apiolin seems to be the most important of the parsley principles. It is prepared by exhausting ether with light petroleum, the re-
sulting liquid being distilled and the residue exhausted with alcohol. The alcoholic solution yields on evaporation a product which on the addition of caustic soda leaves a thick reddish liquid. This apiolin, given in poisonous doses, produces somnolence, stupor, paresis, and motor inco-ordination, with accelerated breathing and pulse, finally death from asphyxia. In small doses its action is especially exerted on the striped muscular fiber, leading to contraction of the vesical and intestinal walls and of the uterine fibers. The latter action is said to be so marked in pregnant guinea-pigs as to almost invariably lead to the production of abortion in these animals. From this it is thought that apiolin may prove to be a valuable therapeutic agent in cases of dysmenorrhea.

The Society for the Study of Inebriety has just held its eighth annual meeting. Dr. Usher, of Melbourne, read a paper on the treatment of alcoholism, in which he said that he distinguished three forms of alcoholism—hereditary, acquired, and infantile—brought about by the negligence and carelessness of parents in giving malt and spirituous liquors to children. At the present time there were, he stated, nearly a hundred asylums and retreats in the world for the treatment of inebriety.

Mr. Richard Cadbury has transferred to the Mayor of Birmingham his late residence, Moseley Hall, which he had previously handsomely endowed as a convalescent home for children. There will be accommodation for one hundred and fifty beds. The present is estimated to be worth £30,000.

The directors of the Paris Pasteur Institute are able to report that since the establishment of the institute there has been a steady diminution in the death-rate of the cases treated. In the first year of its work the percentage of deaths was 0.94; in 1887, 0.73; in 1888, 0.55; in 1889, 0.38; in 1890, 0.32, and in 1891, 0.19.

Dr. George Buchanan, F. R. S., has had the honor of knighthood conferred upon him on his retirement from the post of medical officer to the Local Government Board. A small provisional committee has been formed with a view of presenting to Dr. Buchanan some permanent testimonial upon his retiring into private life.

The Committee on Color Vision appointed by the Royal Society held twenty-seven sittings and examined five hundred individuals as to their color vision. Their recommendations are not of a drastic nature, and do not involve any great departure from the methods now in use for testing vision, although practical instructions are given to be carried out by a central authority.

London, April, 1892.

Abstracts and Selections.

Neuralgias and Neuralgic Affections. At a recent meeting of the Medical College of Vienna, Benedikt read a paper on the above subject, in which he distinguished three kinds of neuralgias: (1) Of the nerve trunks or plexuses; (2) of the nerve roots; (3) of the terminations of the nerves.

In neuralgias of the nerve trunks and plexuses there are not only pains during the attacks, but apart from the attacks there are painful points over the tract of the nerve. In most cases all the nerves which issue from a plexus are more or less affected.

The prognosis of idiopathic affections of the nerve-trunks and plexuses is very favorable when the specific treatment is applied from the first. Among the specific medicines, Benedikt mentions in terms of special approbation iodine and subcutaneous injections of phenic acid. The salicylates and antipyrine have a curative effect only when the natural duration of the affection is short. Narcotics should be given as little as possible, as they produce only a deceptive lull. The truly specific modes of treatment are galvanization and punctiform cauterizations. Benedikt compels the eschars following the cauterizations to suppurate for eight or ten days by means of an epispastic application, and never has recourse to more than one cauterization. This treatment is, in his estimation, so efficacious that when it fails one may affirm that there exists in the neighborhood of the nerve a lesion not yet appreciable, or a constitutional disease, and that this is the cause of the neuralgia.

Neuralgias of the nerve-roots are characterized by very intense intermittent pains without points douloureux. The nerve is painful to the touch, but this pain is alleviated by pressure. This variety of pain is met with in ataxia and in certain painful tics. These neuralgias at the commencement are unilateral; they denote often an alteration of the spinal meninges, in which case they do not coincide with neural-
gias of the nerve trunks and plexuses—while the eccentric idiopathic neuralgias are often associated with peripheral pains or invade the nerve terminations. The unilateral, eccentric, idiopathic neuralgias of the roots have no tendency to follow an ascending course. Galvanization employed against these neuralgias gives no result, while fardization loco dolenti exercises a calming but not curative action. On the other hand, the electric cautérizations over the seat of these neuralgias have a very favorable action. The cautérization must be applied over the roots which contain the sensory fibers of the region affected.

In the neuralgic affections of the nerve terminations (arthralgias, aphalgias) cautérization has also a very satisfactory effect. Faradization and the electro-static douche are very efficacious against migraine. As most patients can not stand the treatment during the attack, it is better to carry it out in the intervals of the pains, beginning with three séances per week, then two, then only one; but the treatment must be persevered with a long time, from nine months to a year in many cases.—Boston Medical and Surgical Journal.

PTOMAINES IN THE URINE OF A PATIENT SUFFERING FROM EXOPHTHALMIC GOITRE.—Drs. E. Boinet and Silbert have obtained from the urine of a woman suffering from exophthalmic goitre, complicated with paralysis of the right arm and irregular action of the heart, several ptomaines which have produced in animals symptoms similar to those from which the patient suffered. The residue of the urine after evaporation injected in minute quantities into the vein of a rabbit's ear caused convulsions and death. In the frog it caused gradual slowing of the heart's action, followed by arrest in diastole accompanied by convulsions. By a modification of Gautier's method they have obtained from the urine, concentrated by boiling, two series of ptomaines, viz., ptomaines A by treatement with caustic soda, ptomaines B by treatment with oxalic acid. Each of the ptomaines, called after the agent by which it has been isolated, as amylic alcohol, benzine, or ether, is possessed of different properties, as shown by experiments on rabbits, guinea pigs, and frogs. The ptomaine A obtained by alcohol causes convulsions with slowing and feebleness of the heart's action, ending in arrest in diastole. The ptomaine A obtained by benzine causes more powerful convulsive movements, but its action upon the heart is less marked. The ptomaine A obtained by ether caused at first increased muscular excitability, and, unlike the others in the A series, arrest of the heart in systole. The ptomaine B obtained by alcohol causes motor paralysis with a fall of temperature, a slight transitory increase in the force of the heart's contractions, followed by feebleness, loss of rhythm, and arrest in diastole. The ptomaine B obtained by ether causes slight convulsive movements and arrest of the heart in systole.—London Lancet.

THOMSEN'S DISEASE.—Dr. C. L. Dana exhibited, at a recent meeting of the New York Neurological Society, a man, thirty-three years of age, presenting the typical phenomena of this disease. The family and personal history of the patient were good. At the age of seventeen weakness of the muscles was first noticed, and three years later the patient found that after clenching the fists he was unable to open them. The affection had gradually become greater and more extensive, until the only muscles not involved were those of the thighs and upper arms. The myotonia was most marked in the forearm and leg muscles, the tendon reflexes were only obtained with difficulty, and there was no sensory disturbance. The reaction to galvanism was slightly increased, and to faradism normal. Dr. Dana expressed the opinion that the phenomena were confined to the muscles, and that the disease was a purely muscular one.

BENZOL, which has been introduced in Germany as a substitute for cresote for the treatment of tuberculosis, is a white powder which is a chemical combination of guaiacol with benzoic acid. It is said to possess all the therapeutic properties of cresote without its disadvantages. Hughes administers it as follows:

Benzol .................................... gr. 1xxv;  
Ess. menthae piperitae ...... ttt. l.  
Div. in troches no. x.

Sig: One or two tablets, immediately after meals, three times daily.

For a week the patient takes three tablets daily; during the next three weeks six are taken daily; during the fifth week three are again taken daily; finally, during the sixth week, none are taken; then the same course is followed over again.

SCARIFICATION OF THE OS UTERI IN CHLOROSIS.—Dr. J. Cheron recommends scarification of the os uteri in chlorosis, and points out that this treatment has been highly spoken of by Schubert and others. The amount of blood to be drawn is about one gram to every kilogram of body weight. According to the above observers these slight bleedings greatly increase the number of red corpuscles and the amount of hemoglobin in the blood.

Dr. Cheron, in making use of scarification
of the os in the treatment of old-standing disease in chlorotic patients, found that the general health as well as the local conditions improved. In many cases an analysis of the blood during and after treatment showed continuous improvement after each scarification. In chlorotic patients congestion of the womb is habitual, and it is easy to obtain forty to sixty grams of blood at one operation. This local treatment seems likely to be of great benefit to chlorotic women, and it is easy to understand that it would be performed much more readily than venesection. The scarification, if done with antiseptic precautions, is not accompanied by risk.—Loudon Lancet.

THE TREATMENT OF WHOOPING COUGH.—According to the Bulletin Générale de Thérapeutique, Galvagno has employed antipyrin combined with resorcin in the following formulae in the treatment of whooping cough in children:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distilled water</td>
<td>5 iijss</td>
</tr>
<tr>
<td>Resorcin</td>
<td>1 gr.</td>
</tr>
<tr>
<td>Antipyrin</td>
<td>1 gr.</td>
</tr>
<tr>
<td>Hydrochloric acid</td>
<td>1 gtt.</td>
</tr>
<tr>
<td>Syrup</td>
<td>5 j. M.</td>
</tr>
</tbody>
</table>

Or, Syrup of acacia

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distilled water</td>
<td>5 iijss</td>
</tr>
<tr>
<td>Resorcin</td>
<td>1 gr.</td>
</tr>
<tr>
<td>Antipyrin</td>
<td>1 gr.</td>
</tr>
<tr>
<td>Syrup</td>
<td>5 j. M.</td>
</tr>
</tbody>
</table>

Sig: Of this, three to five dessertspoonfuls are given each day.

Under this treatment the duration of the disease, according to the author, does not exceed twelve days.

EXALGIN IN CHOREA.—Dr. Löwenthal, in a recent number of the Berliner Klin. Wochenschrift, publishes the results of the treatment of chorea by this drug. Thirty-five cases were treated, and the results upon the whole were good. In the majority of instances it was found that the sooner treatment was commenced after the onset of the illness the more efficacious was the drug and the more rapid was recovery; but in a few bad cases, in spite of a regular use of the drug, the patient became worse for the first two weeks, but improved subsequently. No severe toxic symptoms were produced, but in a few cases headache, malaise, and vomiting followed, and in three there was distinct jaundice. The dose given was usually from one and a half to three grains, and in most cases improvement followed after from sixty to ninety grains in all had been administered. The conclusion drawn is that exalgin, like many other drugs, is efficacious in chorea, but that it has no specific action in this disease.—London Lancet.

METHYLENE BLUE.—A case of retinitis, due to acute Bright’s disease, has been treated successfully with this drug in France by Dr. Gillet de Grandmont. He gave it to a patient whose urine contained a considerable quantity of albumen, in doses of two centigrams three times a day. It caused a marked improvement; the renal symptoms abated, and the retinitis disappeared so rapidly that the sight was normal in four days. Was this a coincidence, or was the improvement due to the milk diet, which in all the reported cases has been strictly adhered to? Methylene blue is excreted by the kidney, and has the curious characteristic of turning the urine a deep green. Dr. G. Paul proposes to take advantage of this property to produce a moral effect upon hypochondriacs and malingerers. A dose of from five to ten centigrams gives rise to decided coloration of the urine without causing any other symptom.—Ibid.

DISINFECTION OF THE MOUTH.—Dellevie calls attention to several conditions, in which the mouth should be made as aseptic as possible. Several infectious micro-organisms are capable of living for indefinite periods in the mouth, in condition to carry infection if the opportunity presents itself. He has found that the following antiseptics may be used as mouth washes without injuring the teeth: corrosive sublimate 1-1,500, B. naphthol 1-1,000, thymol 1-1,000, salicylic acid 1-350, saccharin 1-250, benzoic acid 1-100.

CALOMEL IN ECLAMPSIA.—Dr. Smits reports, in the Frauenarzt for September, 1891, the case of a young pregnant woman, nineteen years old, who had a series of convulsions followed by profound coma. The urine was very scanty and albuminous, and the skin was dry. Pilocarpine was tried without any good results, and it was then determined to give an active purgative. For this purpose Dr. Smits gave a large dose of calomel, which caused twenty stools, containing many uric acid crystals. The patient recovered completely, and gave birth six days later to a dead fetus.

URTICARIA.—

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iodol</td>
<td>1 gr.</td>
</tr>
<tr>
<td>Chloral</td>
<td>1 gr.</td>
</tr>
<tr>
<td>Tarro-petrole, No. 1</td>
<td>5 j. M.</td>
</tr>
</tbody>
</table>

Sig: Apply twice daily in gentle friction.

EXALGINE.—Exalgin is proving of value in neuralgia and rheumatism, in doses of two grains from three to six times a day.
GOLD IN MORE THAN A THERAPEUTIC SENSE.

There is probably no fad in medicine more pernicious in influence than the so-called "Chloride of Gold, or Keeley's Cure for Inebriety," since it not only puts in the trembling hands of the tottering victim of strong drink a broken reed, but tempts some regular physicians, who love gold better than the Code, to take a short cut to wealth by a route which can not fail to compromise their professional standing. Already several well-known physicians in various parts of the land have taken the damaging if not fatal plunge, and it is certain that others will follow. Indeed it is a question which the State and local societies must soon be called upon to face, and we therefore commend to them the following from the proceedings of the Massachusetts State Medical Society. The trumpet goes forth with no uncertain sound:

At the annual meeting of the Hampden District Medical Society, of Massachusetts, held on the 20th ult., the following preambles and resolution were adopted:

Whereas, According to common and newspaper report and upon information and belief, it is known that a member of this Society and Fellow of the Massachusetts Medical Society in regular standing has, by associating himself with one of the most notorious impostors of this century, in the application and use of a remedy for the cure of inebriety, called "bichloride of gold," and whose exact composition it is pretended is known only by and is the sole property of a certain individual; and

Whereas, No such stable chemical combination is possible, and the substance actually used with so much secrecy and profit to the proprietor is and has been employed in suitable cases for years by regular physicians, who well know its limitations and dangers; and

Whereas, By associating himself with a regular physician this pretender hopes to gain prestige and the quasi-endorsement of the regular profession, thus enabling him longer to delude the public; and

Whereas, The association of a regular physician in such a capacity is calculated to injure the public and is degrading to those who are in fellowship with such physician, and recognizing that "naught but evil can finally result from trifling with moral or physical facts, and that it is better to cure rightly and really than wrongly and delusively," and that by the "humbuggery of secrecy, delusion, and hypnotic suggestion," a far less number will, in the end, receive benefit; and

Whereas, In those cases of inebriety claimed to have been cured by means of this pretended secret method of treatment, it is our opinion that such cures resulted not because of said treatment, but in spite of it, and there seems little doubt that hypnotic suggestion played an important part in effecting said cures, and it is our opinion that in all of the so-called "cures" the result attained could have been better secured by improving the moral condition of the patient, by the use of tonics or hydro-therapeutics, regulating nervous action, and by attention to the digestive tract, without subjecting the patient to the dangers of another form of inebriety, and without the element of secrecy. It is therefore

Resolved, That this Society hereby directs its president to refer this subject to a proper committee, who shall, before the next regular meeting, ascertain if any member of this Society has identified himself with the manufacture, sale, distribution, or use of any secret remedy, contrary to the Code of Ethics under which this Society is organized, and, if so, that such member or members be recommended for expulsion from membership in this Society at said next regular meeting.
Notes and Queries.

Editors American Practitioner and News:

The notes which appeared in your journal of March 12th last, of a case of "loss of use of the left arm" subsequent to instrumental delivery are highly interesting, my only regret being that the account is not fuller and more complete. From the facts related, however, I am inclined to think that the case bears a close relationship to several that was my privilege to see when in attendance at the Great Ormond Street Hospital, London, England, in the history of all of which there was discovered difficult or instrumental delivery, usually no external evidence of any had been noticed. The account generally given was that when the baby was a few days old the nurse or mother, when handling it, had discovered that one arm was "limp and useless." The principal points in a case of which I have the notes, are as follows: Female, age three months; labor difficult, traction made in left axilla to hasten delivery. A few days after birth it was observed that the baby "never raised its left arm." There is paralysis of voluntary movement in the deltoid, with wasting; the forearm is rotated so that the dorsum of the hand is toward the chest (the antagonizing influence of the pronators having evidently been lost, the long supinator holds dominion over the forearm), the thumb is flexed and adducted on to the palm of the hand. The reaction to the faradic current is lost in the deltoid, but in the rest of the arm and forearm it seems perfect. In this case the brachial plexus, in some of its branches, was probably injured—the circumflex undoubtedly; and I think an injury to the inner head of the median just where it leaves the inner cord would account for the rest of the paralysis, leaving some of the muscles supplied by that nerve unaffected. In the case related by Dr. Hustead there can, I think, be but little doubt but that there has been injury to some of the anterior cervical nerves which go to form the brachial plexus, probably the fifth, sixth, and seventh, and through them (a) the musculo-cutaneous (br. from ante-cord) supplying the biceps, coraco-brachialis, and brachialis anticus, so that "when forearm is flexed or carried up to the head it falls back passive;" (b) the circumflex (from post-cord) supplying the deltoid and teres minor, which will account for the wasting in this region; (c) the musculo-spiral (from post-cord) supplying the triceps, brachialis anticus (partly), supinator longus and extensors of the hand and wrist. I include the muscles supplied by this nerve, for were they unaffected the supinator longus and the part of the brachialis anticus would act as flexors of the forearm sufficiently to prevent it from "falling back" in the useless manner as described.

The injury in this case was evidently supraclavicular, the "bruise on the top of the shoulder" having been the external evidence of injury more deeply seated.

The condition, by some teachers, has been called "birth palsy," and a better name will be hard to find; but as Gowers and others describe a distinct affection, the pathological condition in which is "meningeval hemorrhage," it would be preferable to use some other name, or to designate the condition according to the nerve or set of nerves involved.

In the way of treatment the best result possible will be obtained by keeping the limb warm by means of flannel or cotton-batting, by gentle friction to the skin and massage to the muscles, with the employment of a weak faradic current, being careful not to alarm the infant at the first application.

F. N. G. STARR, M. B.,
Assistant Demonstrator of Anatomy, Toronto University.

Editors American Practitioner and News:

Throat and Aural Disease Following Influenza.—In an article in the last number of the New York Medical Journal, by Beverley Robinson, M. D., on "Some Nasal, Throat, and Aural Symptoms and Disorders met with in Influenza," and in many other articles recently written on the same subject, reference is frequently made to the dry, irritating cough, which no internal medication appears to relieve, and on which local treatment appears to have but little effect. Dr. Robinson, in the article above referred to, says:

"In the laryngitis of influenza there is not the amount of local soreness, hoarseness, or pain on swallowing, which we expect to find when
the ocular appearances reveal so much local inflammation.

"I have never observed within the larynx either the ulcerations, pronounced edema, or the membranous deposits which have been noted in Europe. Singular to say, at times when there has been a most rebellious and painful cough, and when the larynx seemed especially affected, the local signs of the inflammation were very slight. Indeed, the true vocal cords were seen to be almost of normal coloration. In these instances particularly the cough was harassing, paroxysmal, often dry, with frequently a prolonged noisy inspiration at the end, which resembled the "whoop" in petrussis, and was obviously due to laryngeal spasm.

"All general remedies fail in these cases to relieve; and, on the other hand, I have known an intra-laryngeal application of iron, or other ordinary astrigent, to be evidently useful in diminishing paroxysms of cough. I could explain such examples only by assuming that I had to do with peripheral nerve irritation (neuritis?) in the larynx, very similar in nature to that met with in many other organs of the body."

I have seen many of these cases, and have had but little trouble in giving relief. The point of irritation is sometimes located deep down in the trachea; again it is high up; at times on the epiglottis. Frequently no local lesion is discoverable; again it can be located. In a few cases I have found a small abrasion of the epiglottis. The following recipe I have found to fail in no case in which the cause was laryngeal or tracheal:

Menthol..........................gr. x to gr. xv;  
Acid, carbolic......................gr. v;  
Benz. meth. coccen. alk. (cocaine  
alk.)..............................gr. iv;  
Seiz albolenae..................... 3 j.

M. Sig: Spray with M-K. & R.'s or Codman &  
S.'s nebulizer four or five times a day.

When the cough is very dry, I add to the above, pilocarpine alkaloid gr. ½. When the secretion is excessive I order rubbed with the menthol, gum camphor gr. iv. This should be sprayed in the mouth, the patient to take deep inspirations and blow it out through the nose, something as cigarette smokers do. The relief is marvelous. The cocaine occasionally makes the patients wakeful, so they can not sleep well, but this can be corrected by the administration of the bromides. This recipe, as all others containing cocaine written by me, I request the druggist to not refill without my consent.

W. CHEATHAM, M. D.

The first session of the International Periodical Congress of Gynecology and Obstetrics will be held in Brussels, Belgium, September 14 to 19, 1892. The following named distinguished gentlemen have been delegated to represent the British Gynecological Society: Robert Barnes, Granville Bantock, A. S. Simpson, Lawson Tait. Great preparations are being made to entertain visiting physicians. His Majesty, King Leopold, will assist at the opening of the congress. There will be a grand reception by the Belgian Gynecological Society; gala performance at the Grand Opera; also a banquet by the Belgium Gynecological Society garden party in the gardens of the royal family, etc. For all information relating to the congress, address Dr. F. Henrotin, American Secretary, 353 Lasalle Avenue, Chicago, Ill.

INDIANA STATE MEDICAL SOCIETY. — The forty-third annual meeting of the Indiana State Medical Society will occur in Indianapolis on Thursday and Friday May 12, and 13, 1892. The meeting will be held in Plymouth Church, located upon the southeast corner of New York and Meridian streets, and will convene at 10 o'clock on the morning of the 12th. It is desired that this shall be the largest and most profitable meeting in the history of the Society. A number of very interesting papers are to be presented, and these will be of special interest to the general practitioner. Frederick C. Woodburn, Chairman of the Committee on Arrangements.

COMEDONES — Unna makes use of:

Woof-fat.......................... 10;  
Vaselin............................. 20;  
Hydrogen peroxide................. 20-40.  M.

This mixture is to be applied to the affected parts and allowed to remain, which can be easily done if the application is made at night. If it can also be applied during the day-time, a further advantageous action is secured.
Original Articles.

THE USE AND ABUSE OF MEDICINES.*

BY H. BROWN, M. D.

Neither propriety nor my own inclination, nor perhaps your patience, would permit me on this occasion to attempt a formal and elaborate essay.

Instead, I shall employ the brief time which custom allot me in submitting to you some practical observations on the use and abuse of medicines on the part both of our profession and of the general public.

I desire, however, not to be misunderstood. While inveighing against the use of drugs I hope I shall not be supposed so recument to the profession, or so affected with the skepticism of some modern schools as to doubt, if not actually to deny, the benefit to be obtained from their proper use in the treatment of disease.

I should stultify myself, for instance, if I doubted or decried the great utility of bloodletting, general or local, of mercury in the treatment of various forms of inflammation, of quinine in intermittent diseases, of the preparations of iron in anemia, or arsenic in cutaneous affections, and of opium, iodine, and colchicum in other special conditions.

Earnestly deprecating as I do the reckless abuse of medicines, I have no word to utter against the active and energetic use of them when the gravity of the disease legitimately requires such methods.

*The President's Address delivered at the Thirty-seventh Annual Meeting of the Kentucky State Medical Association.

The Latin aphorism, "In medio tutis-imus ibi," points us to the safer and better course, which is the middle one.

From the violent treatment of the heroic school of thirty or forty years ago, from bloodletting and counter-irritation in their severest forms, and almost without discrimination, and from the almost universal use of drastic purgatives and hydrogogue cathartics, it is certainly not the part of wisdom to fly to the other extreme and discard wholly these effective and important measures, or lapse into the imbecility of treatment which is becoming characteristic of one wing of our profession. From such violent methods, indiscriminately employed, a reaction was inevitable. It came, and, after the fashion of reactions, it has gone in some quarters entirely too far. "The pendulum has swung to the other extreme."

This tendency has no doubt been aided by a change which has taken place in the type of disease. It is quite impossible to doubt, comparing our own later experience and observation with the data of older and trustworthy authorities, that acute diseases do not now generally make their appearance in the same violent form that they did a jubilee of years ago. The reaction in question received also a great momentum from the changes produced in the constitutions of men and women by the progress of our civilization.

As a people advances in commerce and in the arts and increases in wealth it acquires habits of ease and luxury, and loses in proportion its moral and physical energy. "It burns the candle of life at both ends," hence the great increase in neuroses or nervous diseases to be observed at the present day. The powers of resistance and endurance are weakened, and there is a general revolt of every thing that is painful, disagreeable or unpalatable. It
should be our care, then, to study and weigh their modifications both in the type of disease and in the constitutions of man and woman, and to carefully adjust old methods to new conditions. By which I mean we should not abandon but simply modify the use of those important and effective measures which have stood the test of the centuries, such as blood-letting, mercury, counter-irritation and the like.

Is it possible that our fathers were altogether mistaken respecting the principle of depletion in inflammation and congestion? They undoubtedly carried it too far in frequent instances, but is it not founded on a rational theory, and when employed moderately is it not with invariable good results? In like manner the great value of mercury leads to its abuse. Properly administered it is an undoubtedly antidote to the most terrible of the diseases which vice has entailed upon humanity. It acts, too, specifically as a stimulant upon one of the most important organs of the human system. The error to which I point, almost as prevalent now as in former times, is the indiscriminate employment of this drug in almost all conceivable diseases and conditions as an alternative, and to the extent of producing salivation.

In reflecting upon the use, disuse, and abuse of remedies by our profession, I am tempted to regard the general neglect or abandonment of counter-irritation as presenting the most remarkable change in modern practice. It is passing strange that since we have ascertained the laws of reflex action, by which alone the chief modus operandi of counter-irritation can be scientifically explained, we have almost consigned this therapeutic measure to the limbo of the past, setting aside at once the results of experience and the light of modern discovery.

I do not think that the views which I have hinted at, rather than expressed, on this subject, derogate in any degree from the importance and usefulness of the medical profession. That we have not made the best use of our opportunities, that we sometimes falter in the use of time-sanctioned remedies, or apply them timidly and feebly, far oftener resorting to them needlessly, indiscriminately, and rashly, must all be confessed.

What effect this confession may have on the confidence of the public in the profession is of course a matter of opinion. For myself, I do not believe their confidence will be impaired by any tendency or effort on our part to restrict within its narrowest limit the application of painful, dangerous or uncertain remedies. Nay, I will venture to say this: that if every specific should fail utterly, if the cinchona trees were all dead and the arsenic and sulphur mines all exhausted, if every drug from the animal, vegetable, and mineral kingdoms were to disappear from the market, a body of enlightened men, organized as a distinct profession, would be required just as much as now, and respected and trusted as now, whose province should be to guard against the cause of disease, to ordain all hygienic conditions of the patient so as to favor the efforts of the system to right itself, and to give those predictions of the course of disease, which only experience can warrant, and which so often relieve the exaggerated fears of sufferers and their friends, or warn them in season of dangers which can not be averted.

Great as the loss would undoubtedly be if certain active remedies could no longer be had, it would leave the medical profession the most essential part of its duties, and all or more than all its present share of honors, for it would be the death-blow to charlatanism, which depends almost solely for its success upon drugs and on the popular error as to their infallible efficacy.

Part of the blame of over-medication rests, as I have said, with the profession, in yielding to the tendency to self-delusion, which seems almost inseparable from the practice; in our mode of inference, too often adopted, of counting only our favorable cases, and in falling into the not uncommon error known in scholastic phrase as "post hoc ergo propter hoc": The patient got well after taking my medicines, therefore he got well because of taking them.

The greater portion of this blame, however, rests properly with the public, which insists on its right to be poisoned by somebody; it is obvious who buys the quack medicines which have
built palaces for the Ayerxes, the Jayneses, the Helmbolds, and last, though not least, the Keeleys of our time. These people have a constituency of millions. Like Barnum of il luminous memory, they believe in and practice on the measureless gullability of a public which actually enjoys being humbugged. The whole dishonest and shameless business is built, as on a rock, upon the popular delusion that sick people must feed upon noxious substances, the more the better, the nastier the more effective.

The outside pressure upon the physician is very great, tending to force him to active treatment, whether in his judgment necessary or not. Some error of diet, some improper habit of the patient, may only need correction, and the administration of drugs be unnecessary or hurtful.

Certain old superstitions, still lingering even in the profession—mist's after the sun has risen—are for the most part at the bottom of this error. The faculty has had two or three lessons containing a deep meaning to those who are willing to read them aright. The use of water-dressings, for instance, in surgery, has only of late completed the series of reforms by which was abolished the coarse and cruel practice of the older surgeons, who, with their dressings of acrid balsams, their tents and leaden tubes, absolutely hindered and delayed the cure.

So now, also, as in a superstitious age, sympathetic powders and the like came in to kill out external over-medication.

The solemn farce-tragedy of homeopathy, whose materia medica is sugar of milk and a nomenclature, is being enacted before our eyes in the present day to teach us the same moral. We should accept the lesson and profit by it. It is, that medicine can not be practiced by fixed, immutable, exact rules; that the science is not itself and can not be an exact science, but is, as it ought to be, a progressive science, constantly pressing upward from failure to triumph, from darkness to light, from doubt to certainty.

My friends and brothers of the art of healing, we have met at this annual session of our Society—a social and professional reunion—to interchange sentiments of friendship, to discuss the subjects presented, to impart the knowledge each has acquired, for the larger part of our most valuable knowledge is derived from a comparison of observation and experience, and to add, by whatever means our meeting affords, our individual contribution to the general sum of professional knowledge.

By means of these annual sessions we are enabled to break away from routine duties for a few days, and by mingling in social intercourse with each other gain that relief from labor and that recreation for body and mind which the overtasked members of our profession so much require.

The range of medical investigation is so wide, and its practice so laborious and exacting, that the life of the physician is one of almost constant study and drudgery. One who conscientiously devotes himself to duty has little time or opportunity to cultivate even the social and literary pursuits which, by widening his field of culture and practical observation, might increase his professional usefulness. The exercise of our profession imposes constant toil and self-abnegation; but to the true physician there are also the constant excitement, activity, and enthusiasm of acquiring knowledge and of applying it to the relief of human suffering. If performed in the right spirit, there is no nobler offering on any of earth's altars than the unpurchased service of the medical priesthood.

The sick man's falterd blessing reaches Heaven through the battered roof of a poor man's cabin even sooner, it may be, than any Te Deum which ever echoed through the arches of vast cathedrals.

It has been said, with exact and literal truth, that the characteristic virtue of the medical profession is charity. Where, in all the circuit of the sun, is the garret or the cellar which its messengers do not penetrate, ready in the cause of humanity to be servants of servants? What district smitten by pestilence was ever known which its heroes have not braved in their missions of mercy?

Our aim, however we may fall short of it, is beneficence, to relieve human sufferings, to prolong human life. Our study is truth—the glorious truth of nature as revealed in her highest, best, and finished creation.
We do not seek her merely with the devotion of the abstract enthusiast, nor for her own sake alone, nor for our own selfish advancement alone, but for that knowledge which is power, and for that power which works good for our fellow men.

This Society was instituted and is sustained, as I construe it, not to subserve the selfish interests of a class or of a profession. Not for this, but to melt the gold out of the past, rejecting the dross of error, to save all the old treasures of knowledge and to mine diligently for new, to cultivate the mutual respect of which outward courtesy is the sign; to work together, to feel together, to take counsel together, and to stand together for the truth, now and always, here and everywhere.

HUNTSVILLE, KY.

PROGRESS IN GYNECOLOGY: A REPORT.*

BY DAVID BARROW, M. D.

In reviewing the field of gynecology for the past year we find nothing that is in actual opposition to the opinions held by gynecologists the year previous; but the real progress in this branch has been in the more general acceptance of the teachings of some of our most active workers.

In many of the societies, general as well as special, discussions have occurred in recent months that are apt to confuse rather than enlighten the general practitioner. There have been battles waged on many occasions between the advocates of minor gynecology, those who believe in treating the uterus without due regard to uterine appendages, and those who disregard almost wholly the uterus in the treatment of diseases of the pelvic organs.

The first class, as a rule, are enthusiastic advocates of intra-uterine medication, make frequent applications to the cervix, often resort to the uterine dilator and sound, and never rest content unless all cervical tears are pared and stitched up. The second class are enthusiastically opposed to the methods of the first, and seem to think that relief to the patient can be only secured by opening the abdomen and re-moving the diseased organs. This class of gynecologists believe that much harm is done by the minor gynecologist, and contend that his manipulations are responsible for the disease that often forces these patients to the abdominal surgeon for relief. The minor gynecologist, on the other hand, condemns the work of the major, and believes that the uterine appendages have been too frequently removed, that good often fails to follow the operation, and that the patient's condition is not infrequently worse than it was before the operation was done. That the two classes of physicians whose opinions are referred to are conscientious in the positions taken, I am sure we all believe; but that there is something materially wrong to account for such difference must be apparent.

That both are to some extent right there can be no question. I believe firmly that disease of the appendages has been created and aggravated by injudicious treatment of the uterus in many cases; and it is also certain that laparotomy has been too frequently resorted to without sufficient cause, and has utterly failed to relieve many patients of distressing symptoms. What then is the trouble? In my opinion it is the non-appreciation of the true pathology of pelvic diseases and incomplete diagnosis that is responsible for much of the difference that exists.

Bernutz and Goupil years ago wrote the pathology of pelvic disease, but unfortunately their work was never appreciated until recent years. They showed that most pelvic inflammation had its starting point in the fallopian tubes: the so-called pelvic abscess was usually a pyosalpinx, and pelvic cellulitis was almost invariably a pelvic peritonitis. With these facts established, with a knowledge of the anatomical relations existing between the uterus and tubes, and the membrane lining both appreciated, and the known law of the extension of inflammation by continuity, it became evident that manipulations upon and applications to the uterus and vagina, when unduly harsh and unattended with strict surgical cleanliness, were fraught with danger. From an endometritis there might develop a salpingitis; from a specific vaginitis, extending through the uterus, there often resulted a salpingitis ending in pus formation, and sometimes in a peritonitis.
so general as to cause death. In this connection I refer to a case I saw with my friend, Dr. Patterson. A young woman, a member of the demi-monde, about twenty years of age, was taken sick on October 17th. Six weeks before she had been treated for gonorrhea, and it was thought that she had been cured. For several days previous to October 17th she was menstruating, and that she might “see company” during that time she had inserted a sponge. She was first seen by Dr. Patterson on the 22d, and at that time was in collapse, and it was on the 23d that I saw her. In his diagnosis of purulent peritonitis I agreed. That night she died, and the following morning an autopsy was held. On opening the abdomen, a quantity of pus escaped; the intestines were everywhere adherent; the tubes and ovaries were disorganized and filled with pus. This case is instructive. From the gonorrhea had set up a salpingitis; the dirty sponge had furnished the septic material to the already diseased tubes, and quickly there followed a general purulent peritonitis. How rapidly these cases sometimes terminate is well shown; in a week the abdomen was full of pus and the patient was dead. Further comment upon this case is unnecessary; its simple narration carries with it truth that must be convincing. Modern pathology, then, teaches us that the great majority of women consulting us for “womb” disease have in reality no disease of the womb at all, but that the fault, when in the pelvis, is with the appendages; that inflammatory disease of the appendages can be lighted up or aggravated by instituting local uterine treatment under the belief that the uterus is the organ diseased. Unquestionably invalidism has been created, and lives have sometimes been sacrificed by the non-recogni-
tion of the actual local condition existing, and, of course, the adoption of injudicious treatment. We must learn that all cervical lacerations, all uterine displacement, all discharges from the uterus, do not mean actual uterine disease, nor need local treatment, for it will be exceptional for disease of the uterus to be responsible for the symptoms complained of by the woman. We must always remember the serious consequences that may follow the introduction of septic material into the genital track, and use every means in our power to preserve and maintain cleanliness. With a full understanding of the pathology of tubo-ovarian inflammation, accompanied with proper diagnostic ability, I do not believe the errors referred to will be committed. To treat an uterine catarrh by local medication, to repair a lacerated cervix by resorting to Emmet's operation, to forcibly dilate for dysmenorrhea or sterility, with the appendages inflamed, is resorting to methods of treatment that are rarely justifiable, and the physician who does so treat his cases must surely come to grief. To those physicians who have not kept abreast with modern gynecology, and who advocate local uterine treatment for most pelvic diseases (and I believe there are still a good many), the question will naturally be asked, what treatment then can be instituted in these cases of apparent uterine disease? To them I would say, no treatment is better than the treatment that is more liable to do harm than good. In these cases blood and nerve tonics will often do greater good than any thing else; systematic purgation will benefit many; counter-irritation to the inguinal regions and applications to the vaginal vault will help, as will fresh air and sunshine; so have mus-age and electricity been highly extolled. So might I mention other treatment that may be required in such cases, but here it is unnecessary. Of course many of them will be forced to go to the abdominal surgeon.

Let us now speak of uterine cases pure. We do meet with cases of endo-metritis that require dilatation, curettage and application to the uterine cavity, certain cervical lacerations should be repaired, some cases of dysmenorrhea will require local treatment, but it always requires diagnostic ability and discrimination in selecting cases. Never let an appearance of disease of the uterus deceive us; push the examination, if necessary, under the influence of an anesthetic, and before the treatment is instituted let us be reasonably sure of the condition of the pelvic organs. A properly conducted bimanual examination will usually enable us to form a correct opinion of the condition of the pelvic organs. To correctly diagnose pelvic diseases, it is absolutely necessary
that the physician should understand this method of examination, for without it mistakes will be frequently made. As dexterity in the bi-manual method increases, so will the necessity for a recourse to other means of diagnosis diminish. The field then for so-called minor gynecology is mainly with cases of uterine disease pure, uterine disease without tubo-ovarian inflammation complicating it, or without it complicating the tubo-ovarian disease. In such cases the treatment usually employed by the minor gynecologist will be of the greatest benefit, and the results obtained will be most satisfactory; but remember well that it is our duty to preserve cleanliness as best we can in all such manipulations and applications. It is not the use of the pessary, dilator, curette, or even the probe, or the objection to uterine medication that has called forth such vigorous protests from some members of our profession, but it is the indiscriminate use of those things in cases utterly unsuited for such treatment. I could not discard the pessary, the dilator, or curette, for all have rendered efficient service; nor could I get along without uterine applications.

Cases of post-puerperal septic endo-metritis and specific endo-metritis, where the inflammation has never extended to the tubes or peritoneum, are not very uncommon, and require special treatment directed to the uterus. Dr. Baldy recently read an instructive paper before the County Medical Society of Philadelphia on Chronic Endo-metritis. He says of these cases: "A local examination disclosed an enlarged and heavy uterus, from the cervix of which an unhealthy, thickish discharge was oozing. Oftentimes the cervix was eroded, and the mucous membrane of the everted lips, if the lips were everted, bled on being touched with a piece of cotton or an instrument." "In some cases the uterine body was comparatively normal to the touch, so far as its consistence was concerned; again, it might be either too soft or, what was more common, extremely hard, and even almost fibrous in character." It was not an uncommon thing to see an endo-metritis and a metritis coexisting; in fact, in chronic cases it was rather the rule than the exception. In these cases he dilated the cervix, curetted, and injected Churchill's tincture of iodine, and the results were satisfactory. All must admit that there is a place for the methods usually employed by the minor gynecologist, and although the field has been greatly restricted in recent years, as the pathology of pelvic diseases has become better understood and our diagnostic acumen increased, still the cases that need such treatment are numerous, and will occupy a considerable part of the gynecologists' attention.

From the two classes of cases just discussed, let us turn to a third. In the first class are found the cases of tubo-ovarian inflammation without uterine complication, or the uterine disease is more apparent than real; in the second are cases of uterine disease pure, the appendages being healthy; and in the third let us consider the cases in which the appendages and the uterus are both actually diseased. These cases are difficult to manage, and it will require the greatest judgment and discrimination to successfully treat them. Shall we treat locally the coexisting uterine disease, and, if so, when is the important point to decide?

In the presence of an acute or subacute tubal inflammation to treat locally a coexisting endo-metritis, or other uterine disease, would, I believe, be hazardous, even should all precautions be taken to guard against septic infection. Notwithstanding that some advise such treatment, I must admit that I should fear the consequences, and would never treat locally a disease of the uterus complicated with active tubal inflammation. In this connection I quote from a recent writer who thinks otherwise: "If they (the appendages) were not sufficiently affected to call for the operation (laparotomy), and if the uterine symptoms predominated and were very annoying, he had no hesitation in treating the uterine cavity. A long-nozzled uterine syringe might with safety be passed into the uterus, even in the presence of considerable pelvic disease, and a local application made."

In the presence of pelvic lesions, after the subsidence of the inflammatory condition, we might, with urgent uterine symptoms, resort to local treatment without very great risk, if all precautions against infection be taken and
harshness avoided; but the necessity for such treatment must be rare indeed. Such cases must be anxiously watched, and any procedure must be carefully weighed before being resorted to. I know of no class of cases where a keener or more discriminating judgment is required than in these, and even then we will sometimes do harm by injudicious treatment.

In this paper I have addressed my remarks more to the general practitioner than to the gynecological specialist, and I hope that this fact will be remembered in the discussion that may follow. Many of you will be forced to treat gynecological cases, no matter whether you wish to or not, for at your homes there may be no specialist. To such I present this paper as a plea. I plead that you appreciate the pathology of pelvic inflammation as enunciated by Bernutz and Goupil; that you be careful not to convert a simple uterine disease into a more serious pelvic inflammation by instituting improper treatment; that you practice surgical cleanliness in all manipulations upon the female genital organs, as the introduction of septic material may be followed by serious consequences; that you cultivate careful methods of diagnosis, and especially that you appreciate the bi-manual method; and, lastly, that you be reasonably certain of the condition of all the pelvic organs before you direct local treatment to any one of them.

LEXINGTON, KY.

DISEASES OF THE RECTUM: A REPORT.*

BY JOHN A. LEWIS, M.D.

Your committee would beg leave to submit the following report upon diseases of the rectum. At no time in the history of medicine has the general practitioner manifested so much interest as now in diseases of the rectum. We believe this increasing interest is in a larger measure due to our fuller acquaintance with the nature and treatment of the diseases of this region.

This improved state of affairs has been brought about by the industrious and pains-taking specialist, who, after years of battling, has at last succeeded in winning back this important domain from the baneful sway of quackery, placing diseases of the rectum and their treatment upon a firm and scientific basis.

It is hard to estimate the debt of gratitude we owe these gentlemen for the signal service they have rendered, not only the profession, but also the cause of humanity. It is within the memory of the older members of this fraternity when the rectum was almost a terra incognita to the regular medical profession. The average physician made no pretensions to any knowledge of diseases of the rectum or their treatment; indeed he made free to confess his ignorance on this subject, and nothing was thought of it. The public would just as soon have thought of consulting the village smith for the treatment of a case of piles as the village doctor. The quack, with his nostrums for bleeding, itching, and blind piles, had a corner on the rectum.

If I was disposed to occupy your time, I think I could offer you a very natural explanation as to how this strange state of affairs came about, but I will not. As the years passed the scientific physician began to turn his attention to the investigation of diseases in this dark and neglected avenue of the human body; his inroads on this domain provoked the most obstinate opposition on the part of the quack, and for years the rectum has been the great battle field, a very Esdrælon, between the regular and the irregular. The struggle has about ended, and to-day the entire domain of the rectum lies open to scientific research; its diseases are as well understood and their treatment perhaps more satisfactory than that of any class of diseases which we are called upon to treat.

The importance of a full and scientific understanding of rectal troubles and their treatment can hardly be overestimated when we consider the fact that perhaps one half of the entire population at one time of life or another seek treatment for some rectal trouble. How miserable existence may be rendered by some of these entirely curable rectal diseases!

Howell, in an article containing a great deal of sound philosophy, entitled the Philosophy

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*Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Association, May, 1892. (For discussion see page 357.)
of Orificial Surgery, says: "There is one predisposing cause for all forms of chronic disease, and that is a sympathetic nerve waste, occasioned by orificial irritation of the lower openings of the body."

This is certain: no man can enjoy existence who is ever conscious of the fact that he has a rectum rendered so by the presence of some harassing trouble in the form of piles, fistulae, fissures, prolapses, or ulcers.

From what I have said, no sensible physician can be deaf to the importance of a clear understanding of these diseases, that he may be fully prepared to perform his part in affording relief to the great army of sufferers who daily seek help at the hands of the medical profession.

In the short résumé which I shall make of the treatment of the most common forms of rectal diseases, I shall endeavor to present in concise and practical form some of the most important facts and truths, which the rectal specialists have taught us, and if I shall be able to help the general practitioner to familiarize himself with some points which may be of value to him in his every-day work, then I shall lay down my task feeling gratified. The latest advance proposed in rectal surgery is a new operation for fistula in ano, first suggested, I believe, by Emmet, which only differs from the old one, with which we are all familiar, in this, that it proposes by means of sutures to obtain primary union of the incised tracks.

But perhaps the most important matter connected with the treatment of rectal diseases, now attracting the largest amount of interest and being freely discussed, is the new treatment for relief and cure of heretofore incurable rectal diseases by the formation of artificial anus through lumbar or inguinal colotomy. Both these important innovations shall receive fuller mention further on in the discussion of the treatment of the diseases under which they naturally fall.

My limited time shall be almost entirely given to the discussion of the treatment—particularly the surgical treatment—of a few of the most important and commoner forms of rectal troubles. Hemorrhoids must naturally come in for a prominent share of mention in any discussion of rectal diseases. In my judgment no case of hemorrhoids can be radically cured without a surgical operation. If you attempt a cure in any other way you will surely fail, wasting both your time and medicine; you had just as well tell your patient this first as last. You have several excellent and successful operations from which you may select the one you may deem best suited to your particular case.

You may choose between carbolic acid injection, the ligature, clamp, and cautery, or nitric acid and Whitehead's operation.

You will naturally expect me to give you the present scientific status of the carbolic-acid treatment. I must frankly tell you that most of our prominent specialists have weighed it in the balances and found it wanting. The principal objections urged are pain, extensive sloughing, abscesses, blind internal fistula, embolism, and the disposition to return. As to embolism, I think it is more theoretical than real. I have never met a case of it, and I do not now recall the record of but a single case. I think Kelsey about sums up the objections when he says: "The amount of inflammation which may be caused by introducing an irritant into a vascular tumor can neither be foretold nor limited."

As to the disposition to return, I think this is perhaps true, the return taking place in three or four years generally. But I am not sure that this charge can not be made against any of the radical operations, though not so frequently.

Now these objections are serious, and come from sources that must command our respect; nevertheless, in the estimation of some excellent physicians this mode of treatment is a justifiable one, and in many instances yields good results. Every operation is open to some objections, and accidents have happened with them all, but are not therefore to be condemned.

If you find a patient who requires an operation, and who has not the time nor the disposition to lie in bed, and who refuses to take an anaesthetic, then I think you have just the case for injection of carbolic acid.

By observing the following suggestions carefully, you may be able to obtain a good result.
without any of the painful or serious consequences which have been set down to the charge of this method of treatment: Use a ten-per-cent solution of carbolic acid in glycerine or olive oil, inject one tumor at a time, not withdrawing the needle for some moments after injecting, preventing as far as possible any outflow of the fluid upon the mucous membrane of the bowel; inject the tumors through a speculum, instead of having the patient to extrude them by straining, as is usually done. In this way you avoid having to return the pile tumors by pressure after injecting. The pressure always forces out the acid, bringing it in contact with the mucous membrane, which will invariably produce prolonged burning.

If you precede your carbolic injection with an injection of cocaine, the acid is sure to flow out through the needle-hole, and in this way produces more pain than it relieves.

Pain and sloughing are generally caused by using too strong solutions and injecting too deeply, and treating too many tumors at once.

The foregoing directions, if followed, may enable you to obtain a good result with the least possible trouble, but pain will follow sometimes in spite of every precaution.

The ligature and the clamp and cautery are the two standard operations. The first has found its strongest advocates in the Allinghams; the last has no less strong friends in Smith in England and Kelsey in America.

Both are safe and radical cures. My own personal experience has been with the ligature, and I have never found it to disappoint me. But I have seen enough of late to convince me that the clamp has some very important advantages over the ligature, and in future I intend to give it a more extended trial.

The operation by the clamp is much the easiest operation to perform, and its advocates claim that it is followed by much less pain and after-trouble than the ligature.

Be cautious not to produce stricture of the bowel by removing too much of the mucous membrane.

The danger of secondary hemorrhage has been accredited to this operation, but we are advised by those who ought to know that this is rather theoretical than otherwise, and in reality there is no danger, provided the pile stump is thoroughly cauterized with the iron at a dull red heat. As a rule little or no pain follows. The bowels are allowed to move right along, and the reflex bladder troubles, which so commonly are present with the ligatures, are absent.

Before closing what I have to say on the subject of hemorrhoids, I ought to mention Whitehead's operation. This is certainly the most radical of all the operations, and without doubt it has one thing in its favor, that is, there can certainly be no return of the disease, since the mucous membrane of the entire pile-bearing area is removed; but the operation seems needlessly severe to me, and I can not believe that it will ever become a popular operation with the general practitioner. I think its use will be confined to the hospitals. Certainly it has yielded very gratifying results in the hands of its originator.

We have before mentioned the new suggestion made by Emmet in operations for fistula in ano, that of obtaining primary union of the divided tracks by closing the incisions with sutures. This certainly ought to be a very desirable addition to the operation. All are aware of the tardiness with which the incisions, especially those through the sphincters, heal. They seem to progress very well to a certain point, and there they stop and sometimes remain for months, and even years. Reasoning from analogy, I do not see why we might not expect success to follow operations made according to this suggestion. We have all seen the operation for complete rupture of the perineum extending through the sphincter ani succeed completely, time and again. Exactly the same principle is involved in the two operations, the only difference being in the presence of the unhealthy, indurated, cicatricial tissue along the track. All this, of course, must be entirely removed. This being thoroughly done, I see no more reason for a failure in one case than in the other. To get union of the sphincter ani is the difficulty in both cases, and the same amount of care in both operations will insure like success. Several operators have reported successful cases. But should you make an effort to obtain immediate
union, and fail, nothing is lost. To insure success the case should be in a hospital or immediately under the eye of the operator.

In the examination of cases of fistula in ano preparatory to an operation, the physician very frequently meets with that condition of things known as external blind fistula. By the utmost diligence he is not able, with his probe or director, to find the internal opening by which the fistulous track communicates with the bowel. It may help you in finding this internal opening to state that it is frequently found much nearer the external sphincter than you might expect. The injection of milk or some colored fluid through the track, after introducing the speculum, may enable you to locate the point of entrance. Dilatation of the sphincter under an anesthetic will permit you to search the entire lower area of the bowel with the eye, and thus you may succeed after other methods have failed. But now and then every effort to pass the probe will prove futile. What shall be done under this condition of things? Force the director through the mucous membrane into the bowel, converting the fistula into a complete one, make the cut just as in any ordinary case.

After making the incision, then search the track carefully for any divergent ones, follow these with the director, opening them up. One of these divergent tracks you will generally find leading into the bowel. But if Kelsey's method of incising the fistulous track is followed, this trouble may all be avoided. His plan is not to make the cut with one single sweep, as is usually done, but to follow each track inch by inch with a sharp pointed director, searching for and dividing divergent tracks as you advance. By this method few external blind fistulae will be found to exist.

Remember that you should never completely divide both sphincters at more than one point until you have exhausted all other methods of treatment. Usually all fistulous tracks can be traced to one point, from which you should make your cut squarely through the sphincter.

In curing a fistula be sure that you do not leave your patient in a more deplorable condition than before the operation. This will be the case should you destroy the controlling power of the sphincter ani. Nothing will appease your patient's dissatisfaction if you be so unfortunate as to leave him in this condition, for truly his "last state would be worse than the first."

Bear this now in mind, fistulous tracks have been cured in other ways than by incision; they have been cured by subcutaneous incision, by injection of stimulating fluids, etc. If the tracks are numerous and your patient in very prostrate condition, do not divide them all at one operation.

Internal blind fistulae are not uncommon. They are difficult to diagnose and troublesome to cure. The most fruitful source of these fistulae, according to Kelsey, is carbolic-acid injection of hemorrhoids.

It may aid you in making your diagnosis to know that your patient has been treated previously by this method. The pathognomonic symptoms of this form of fistula are pain on defecation, very much resembling the pain of fissure and the indurated track. Complete incision of the track, with local applications, is the treatment.

Ought lung complications to be a bar to operations for fistula? Unquestionably no! The only point to be considered in these cases is the patient's ability to stand the operation, and whether his vital powers are sufficient to insure healing of the incisions.

No disease of the rectum is accompanied by so distressing and unbearable symptoms as fissure of the anus, and yet we approach the treatment with the greatest confidence. Kelsey claims that one third of the cases of fissure can be cured by a few topical applications of nitrate of silver in the strength of five to ten grains to the ounce, applied with camel's hair pencil. I am glad that so competent an observer has made this statement, because it will go far to restore the confidence of the profession in this simple remedy; for I am satisfied that the majority have for a long time been of the opinion that a surgical procedure was nearly always necessary to cure a fissure.

By the injection of cocaine under the base of a fissure, before making the incision, you can make an excellent and painless cure without an anesthetic; but if the case is an aggravated one, and you have failed with any of the milder
plans, do not hesitate longer, but give an anesthetic, dilate the sphincter thoroughly, and incise through the base of the fissure also.

Abscesses of the rectum must be treated by early and free incisions to limit destruction.

Prolapsus can be treated successfully either by linear cauterization with a point of hot iron, being careful to avoid cutaneous surfaces, or by removing the redundant mucous membrane by clamp and cautery, as in an operation for piles. Be careful to preserve a strip of mucous membrane intact on each side of the bowel, half an inch in width. This will insure against stricture.

Upon the question of the origin of non-malignant strictures of the rectum, Kelsey found in thirty nine cases less than thirty-three per cent to be venereal in character. This will be a surprise to the profession at large, who, I am satisfied, heretofore have viewed the majority of these strictures as being of syphilitic origin. It is refreshing to be able to make this statement upon so high authority. For once at least it would seem that possibly poor, erring humanity had been more sinned against than sinning.

The most vital point in the treatment of non-malignant strictures is gradual, painless, but continuous dilatation. The rapid and forcible dilatation of the old method always seems to do harm. Kelsey introduces into the stricture a hard rubber stem on going to bed, and allows it to remain until morning. The patient should not be conscious of its presence.

The treatment of ulceration of the bowels, especially the rectum and sigmoid flexure, may be summed up in very few words. Prolonged rest in bed, with liquid diet and topical applications of nitrate of silver or carbolic acid.

But by far the most important advance in the treatment of rectal diseases is the proposed cure or amelioration of heretofore incurable troubles of the rectum and sigmoid flexure by the operation of colotomy. Colotomy, especially the lumbar operation, is a very old one, but was rarely ever performed except as a dernier ressort, with only the thought of prolonging life under very loathsome conditions.

So great was the aversion to an artificial anus that most physicians preferred to let a patient die rather than burden his days with a cure which seemed to be worse really than the disease. But of late a complete revolution has been wrought, not only as to the loathsomeness of the procedure but also as to ultimate results to be gained by this operation. By the operation of colotomy the fecal discharge may for a time or indefinitely be completely diverted from the rectum, securing perfect rest for that organ, thus enabling the physician to afford amelioration, if not cure, to heretofore incurable rectal diseases.

When one reflects upon the unceasing work of the rectum and the nature of the work, being the great sewer pipe through which the garbage of the entire system must flow, we can not wonder at its many forms of disease, nor can we fail to see the good which may likely follow from any measure which promises rest to this organ from the foul current which constantly sweeps along its surfaces. I have sometimes thought, what a boon a double rectum would be to mankind, if so arranged that one might do the work while the other lay by for repairs! And I am not sure but that Dame Nature had half a mind in that direction, and really made a start for a double arrangement when she threw out the vermiform appendix from the cecum, which after all may be nothing more than an abortive effort at a second rectum.

A most interesting discussion of the merits of the two operations for colotomy is still going on between the different advocates. Bryant claims that the lumbar operation has all the advantages of the inguinal, besides being safer and the easier to perform; but the objections to this operation seem to be the deep incision, difficulty in finding the colon, difficulty in forming sufficient spur to completely prevent the passage of fecal matter beyond the artificial opening, and the awkward position for the artificial anus.

The inguinal operation has many things in its favor. There seems to be an opinion that an artificial anus created in the sigmoid flexure more nearly accords to the natural one, and that owing to the peculiar nervous distribution in the sigmoid flexure, that the patient has some control over the act of defecation. In
other words, the patient feels the impulse to have an action, and can prepare for it at certain times. This, if true, is certainly a great desideratum, and does away largely with the idea of loathsome ness. Further, no artificial anus can be said to be a success which does not provide a spur sufficient to completely prevent the passage of feces beyond the artificial opening. The very central idea of the operation of colotomy being to free the bowel below the point of opening from the presence of irritating feces, this can certainly be better accomplished in the inguinal region, where the bowel can be drawn out and fixed in any position required to effect that end. And lastly, the greater ease and certainty with which the artificial anus can be closed in the inguinal situation leaves little to be desired so far as location is concerned. So far it seems to me the inguinal operation has the vantage ground in the majority of cases to which the procedure is applicable. But there are conditions in which the seat of disease is too high for the inguinal, which may be entirely suitable for the lumbar operation.

I should like to give you the indications for this operation as laid down by the most eminent writers upon this subject, but this paper is already drawn out too long. And yet I feel that I ought not to conclude without referring very briefly to what, in my estimation, is the most important matter connected with the entire subject, that is, to the prevention of these ills, the treatment of which I have spoken.

I believe that constipation is by far the most fruitful source of rectal troubles. I have no time to enter into its discussion; I only wish I had. But it does seem to me that this condition ought to be preventible, if not curable, and I am impressed with the belief that if we had exercised half the ingenuity, energy, and skill in preventing these troubles which we have exhibited in the cure of them, we would have measurably succeeded. If you will take the pains to make inquiry, you will find that those persons who have regular daily actions of a natural character rarely have rectal diseases. The habitually constipated are the ones who suffer from these troubles. I am confident that constipation largely comes from the neglect to form early in life a daily habit of moving the bowels, and I believe this neglect is most frequently the result of indulgence or ignorance, want of time or poor water-closet accommodations. But from whatever cause it comes, whether from errors of habit or of diet, it is the "spring of woes unnumbered." And the medical profession should "cry aloud and spare not" in instructing those over whose lives and health they stand as guardians of the discomforts and dangers which will surely come to them sooner or later as the penalty of this personal neglect. No sensible physician can fail to see wisdom in that adage which says, "An ounce of prevention is worth a pound of cure."

GEORGETOWN, KY.

GENITO-URINARY DISEASES FOR THE YEAR: A REPORT. *

By E. R. PALMER, M. D.
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The objects of this paper are twofold. First, to consume as little of your time as possible; and second, to give as succinctly as I can the news of the year in this department of practice.

The male urethra is as old an active battlefield. Nothing especially new has been evolved in the past twelve months.

Among the experts of the large cities a tendency somewhat toward the elaboration of the electroscopic fad has been manifested. Various modifications of the urethroscope of Leiter have been introduced. Of these, Otis' modification of the original instrument and the wire speculum of F. Tilden Brown are chiefly deserving of mention. The former is much lighter than the instrument of Leiter, and when used with the endoscopic tube of Klotz seems to be about as near perfect as can be. The specula of Dr. Brown, which I saw him apply about a year ago, promise in the hands of experts to accomplish the visual localization of urethral lesions and coarctations. One good this method of urethral exploration has accomplished is to put a check on promiscuous internal urethrotomy, it being demonstrated by the urethroscope that, * Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Association, May, 1892.
like other mucous tracts, the urethra may frequently be the seat of localized neoplasmatata that call for enucleation rather than urethrotomy. In cases of genuine stricture, however, especially of small caliber, urethrotomy is deservedly as popular as ever. All authorities, I think, are agreed that if cutting be done in stricture of the pendulous urethra, it should be done internally, and on the roof. At Altoona, at the annual meeting of the Genito Urinary Society in June, 1890, I read a report of fourteen cases of successful internal urethrotomy at the bulbo-membranous juncture without the perineal section, as advised by Harrison, Keyes, and others. Since that time I have done the same operation for close stricture in twenty additional unselected cases with successful results in each instance. When I say successful, I mean at least a temporary restoration of urethral caliber without urine fever, hemorrhage into the bladder, or any other of the untoward results that are claimed to endanger a purely internal operation in close stricture at or back of the bulb. In doing the operation I get through the narrow opening at the site of stricture with a Bank's dilating filiform bougie, and follow it at once with the Massioneuve staff, cutting on this sufficiently to admit a No. 23 or No. 25 curved sound, which is followed rapidly by No. 27, and, if possible, No. 29, the bladder being afterward emptied and washed out, together with the urethra, with a hot boric and boro-salicylic solution.

Gonorrhea is still a bête noire. New treatments that are not new and old ones ferreted out from dusty book shelves are heralded in each succeeding journal. Beech-tar cresote in a one-per-cent decoction of witch hazel is declared to be a specific. Six drops of oil of wintergreen three times daily is announced as a good thing, while every new salinile, all the antis, and every patented synthetical novelty is vaunted as a dead shot. To demonstrate the marvelous powers of one of these latter, no less than five pages of the New York Journal of last week are given up. This wonderful specific is dermatol suspended in plasment, and injected with a special syringe made on the paint tube order, and for sale by —— and ——, 41144 Fifth Avenue.

Among the old remedies revamped is one that has been blamed for much damage that it did not always do—one that is powerful for good surely as well as possibly for harm. I allude to nitrate of silver, a remedy that has always held its place in the treatment of deep chronic urethritis, but that is now being urged again as a specific in acute anterior troubles by Dr. Guiteras, of New York City. His plan is to begin in acute cases with a solution, which he himself injects, of 2 grains to 1 ounce, the next day 4 grains, the next 6, the next 8, and the next 10. On the sixth day in a typical ca-e, discharge slight, no chordoe, no ardor urine, etc. Same treatment until the ninth day, when the patient returned cured. He, however, recommends that the progression be at the rate of one grain a day instead of two.

Dr. G. E. Brewer, in a paper read last June, advocates as strongly as he did five years ago the retrojection plan of treatment with weak hot solutions of mercuric bichloride. Its results in my hands, while generally of a beneficial character, are not invariably so. In connection with gonorrhea is naturally to be considered the question of cystitis. Tuberculosis uro-genitalis has been shown by Bryson and others to be a quite common form of tubercular infection. Excluding this and calculus, gonorrhea is indisputably the usual cause of cystitis.

It is of interest in this age of surgical aggressiveness to note the skepticism with which Dr. Tyson, as a repre-entative of the purely medical school, holds many of our vaunted diuretics. Opening of the bladder, rest, and drainage are the surest means of relief in chronic cases, while topical applications of various remedies, such as boric acid, salicylic acid, bi-chloride of mercury, nitrate silver, etc., are required in the more recent cases. Of diuretics copious draughts of pure water head the list. Among the new drugs just now the most popular is diuretin in 15 grain doses three times a day. Diuretin is a double salicylate of theo-bromate of sodium, and is recommended as combining the two desiderata, diuresis and antisepsis.

The significance of albuminuria is a question that it behooves the profession generally to deal with vigorously. The conclusions reached by Dr. Sturgis are those now commonly held by the profession, namely: "That albumen in the
urine does not necessarily signify any renal disease, that it exists temporarily in many diseases unassociated with any organic renal complication; that, from the uncertainty of tests and methods of testing, it loses a great deal of its value as a diagnostic sign, and that if present in even a small quantity it is a danger signal, and if persistent indicates some serious organic lesion." In view of the fact that life insurance companies reject all applicants who have even a trace of albumen in their urine, I repeat that the profession owes it to the public that the significance of this symptom should be recast. I will suggest as causes of a considerable number of such cases, uncured gonorrhea without discharge and of long standing, and persistent bicycle riding. I am quite sure I have seen several cases of albuminuria due to the latter cause.

Two cases of glycosuria have recently come under my care that were evidently of a gouty origin. With the rapid advance in this country of so called civilization, the gouty habit is becoming indigenous to the soil, especially among the high livers of our large cities, and a possible symptom not to be overlooked is glycosuria. The absence of other symptoms of genuine diabetes mellitus, the presence of additional phases of the gouty diathesis, and the disappearance of the sugar with these other symptoms under an anti-lithemic regimen demonstrate the true nature of this condition.

The questionable success of electrocution from a humanitarian standpoint has led a number of prominent medical men in New York and elsewhere to urge castration as a punishment for murderers; not a new idea it is true, but yet possibly a very good one.

Speaking of castration, reminds me that two comparatively new suggestions have been advanced this year in the matter of treatment of that painful and often serious complication of gonorrhea, epididymitis. Dr. George E. Brewer recommends in both acute and chronic disease of this nature the application of the dry poultice of Langlebert. "The dressing consists in a moderately thick layer of cotton-wool applied over the inflamed testicle. This is covered by a layer of thin rubber protective tissue, so fashioned that it completely incloses the diseased organ, with its edges extending on to the healthy skin of the serotum. This is secured by a snugly-applied gauze bandage, the whole held in place by a suspensory." I have used the dressing, barring the final suspensory, which I find hardly necessary, and like it very much. The patient is not necessarily confined to his bed, and finds both relief of pain and rapid subsidence of the swelling in its use.

Most of the standard authorities have recommended for years the cautious prostatic instillation of nitrate of silver in chronic and relapsing cases of swelled testicle. Prof. Samuel Alexander, of Bellevue, in a paper published last December, advised the deep injection of silver solutions in the acute stage as well, beginning with not stronger than a three-grain to the ounce solution, and using of this not more than fifteen minims with a Keyses syringe. He argues that epididymitis always means prostatitis, and calls attention to the successful use of the silver drop in acute gonorrheal prostatitis and cystitis. Dr. Alexander reports a number of cases of success by this method. R. W. Taylor calls attention to the statement in a former edition of his work on venereal diseases that Boeck, of Christiana, has recommended this same procedure.

In the matter of syphilis, but little that is crisp can be said. Dr. Taylor assures me that in the new edition of Bunstead and Taylor, now nearly ready, he will have an exceedingly elaborate and comprehensive section dealing purely with the treatment of this malady. That syphilis as a malignant disease is dying out is patent to all philographers. Cases now and then present with all the old-time virulence manifesting, but surely in a large majority of the cases, like Prof. Conner, of Cincinnati, we may almost characterize the disease as benign. Whether the civilized world in its germ-plasm is becoming gradually syphilized, or whether the virus through many cultures is becoming attenuated and so benign, or both, or neither, the clinical fact stands as above stated.

In the matter of treatment, enucleation of the initial lesion is hardly any longer advocated, except on cosmetic grounds. The following quotation from a paper published by Jonathan Hutchinson last June may, I think, be given as being strictly true:
"I do not think that there can be any doubt whatever that during the last quarter of a century mercury has been steadily gaining the confidence of the profession and the public as the one real remedy for syphilis."

Like this eminent syphigrapher, I am exceedingly fond of chalk-mercury in small doses, one or two grains three times a day. It is borne well by the stomach and bowels, and can be given longer than many other mercurials without ptyalizing. Lustgarten's tannated protiodide has been strongly urged of late by C. W. Allen, of New York. I use a good deal of it, and like it very much. Of course the protiodide is held most generally and worthily in highest esteem, and while treatment by injection is justly popular, and but for its filthiness deserving of quite general use, the mercurial vapor bath seems to have dropped into oblivion, carrying with it the novelty of a few years ago, hypodermic mercurialization.

I have already consumed too much of your time. More and more interest is being shown in a study of syphilis of the nervous system. The mooted question of relationship of this disease to locomotor ataxia would almost require hours to discuss. Like most students in this field, I am half convinced that a majority of the chronic neuroses of man are syphilitic in their origin, and like my fellows, too, I can not but hold that syphilis and gonorrhea together are responsible for a large majority of all the chronic ills that vex humanity in its fleeting flesh.

**A UNIQue OPERATION.**—Prof. William H. Keen, on the 4th inst., performed an amputation at the hip-joint upon a lady who was suffering with a rapidly-growing sarcoma of the thigh, and who had been sent from Brazil to see what could be done for her relief. What makes the case probably unique in surgical annals, is the fact that she was in the fifth month of pregnancy at the time of operation. The arteries were controlled by Wyeth's method, and scarcely any loss of blood occurred. Last accounts showed entire absence of fever, and patient doing well. A detailed report of this case will be published soon.

**Societies.**

**KENTUCKY STATE MEDICAL SOCIETY.**

Stated Meeting, Louisville, May 4, 5, and 6, 1892, Dr. H. Brown, of Hustonville, Ky., President in the chair.

Dr. David Barrow, of Lexington, read the report on Gynecology. (See page 324.)

**DISCUSSION.**

Dr. E. R. Palmer: I was delighted to have the opportunity of hearing the paper that has just been read, and I have a few words to say in connection with this very interesting subject. I am one of those disbelievers in moral purity, who hold that a very large proportion of the pelvic ills of femininity are dependent upon what might be called marital gonorrhea. I do not propose to discuss that phase of pelvic septic trouble. A few years ago some eminent investigator (I have forgotten his name) made the statement that, in the examination of the discharges from the vaginas of multipara, he found in 50 per cent of the cases examined the various cocci of suppuration; in other words, 50 per cent of the cases in good pure mothers were pus discharges septic in their nature. Now, Mr. President, what I have to say is not at all new, because in 1867 I heard Dr. Thomas, of New York, in the vigor of all his youth and enthusiasm, make a statement similar to what I propose to make now, that is, with reference to the etiology of widespread suppuration or pus generation in the vaginas of our mothers, wives, and nurses also. I saw in a paper the other day that ladies in a Canadian city had a grand convention, and had celebrated their magnificent resolve by building in a public square a bonfire, being fed by the corsets they had been wearing. It was a revival of the old tirade against the corset. I have not forgotten what Thomas said, that women should burn their open drawers instead of their corsets. The idea of a beautifully dressed woman with trail sweeping the streets! The idea of that mode of dress being countenanced by the profession!

While the profession are warring against corsets, is it not ridiculous, not to say criminal, for us to take the position that the corset is
harmful and the open drawers is not? The knights of old used to protect the genital organs of their wives from receiving germs during the day when they had gone to business. If it is gonorrhea, it is due to external infection, and I hold that infection takes place as frequently in this as in any other way on account of the delicate organ being unprotected.

Dr. W. H. Wathen: The paper just read by Dr. Barrow is so very conclusive in most particulars that it hardly admits of any discussion, but I will go over the ground briefly. He takes a conservative view of the subject, which I think is the correct one. There is unquestionably too much meddlesome minor gynecology, and there is too much laparotomy. That cases are treated improperly by entering the uterus with the sound with applicators charged with some medicine, causing pelvic troubles or increasing the pelvic trouble that exists within the uterine adnexa, and that persons are operating and removing the uterine adnexa where other treatment would accomplish the purpose just as well without the mutilation of the woman, there can be no doubt.

I concur with Dr. Barrow in these views, and all I have to say is this, that a great deal of the mischief that is done in minor gynecology is because of ignorance or carelessness on the part of the person treating the patient. I have quite frequently heard the expression from men who are recognized as good men in abdominal and pelvic surgery, that the sound should be thrown away, that it had no place whatever in gynecology. I differ with these men, and claim that the sound may be used very advantageously sometimes; and if it is carefully used I do not believe that it is capable of doing serious mischief. The trouble is that some practitioners who are ignorant or careless will introduce a sound into the uterine cavity where there is extensive salpingitis and probably accumulations of pus; it may cause serious additional trouble. Again, I have seen the sound frequently used without washing it, with enough septic matter upon it to infect, so to speak, the universe. Of course bad results would be expected from that. I have seen the sound introduced frequently without using a speculum to expose the neck of the womb, without cleansing or making aseptic the vagina, and under such circumstances as these we must expect mischief; but where there is no disease or inflammation of the fallopian tubes, where there is an absence of accumulation of pus in the uterine adnexa, where the neck of the womb is exposed and the vagina is made clean, the introduction of an aseptic sound will cause no trouble. I can not refer to a case, in an extensive gynecological practice extending from fifteen to twenty years, where I have ever caused any pelvic inflammation or septic invasion of the tubes or of the peritoneum by the use of the sound. I have never introduced it until I have thoroughly washed it. I have not introduced it until I have exposed the neck of the womb and made the parts clean. If these precautions are taken, the injurious effect of the sound will not amount to much. As to the dilator, I believe it is used too much. I have under treatment at present a woman who has been seriously injured by rapid dilatation of the womb. I remember in one instance where there was a pus cavity that ruptured into the rectum, where the woman had salpingitis, a physician of some prominence dilated the uterus upon a number of occasions with rapid dilatation, and of course the results were what would be expected.

Dr. L. S. McMurtry: I wish to emphasize one or two points in the paper that has just been read by Dr. Barrow. I am glad he took occasion to deal with this subject from advanced lines of the most recent progress in gynecie surgery. It is only recently that we have discovered that the physician often, in his efforts to cure women of comparatively minor ills to which they are subject, is innocently the means of inflicting upon them a very much more serious malady.

I suppose there are very few practitioners who have had a large experience in treating the diseases of the pelvic organs who have not seen harm result from too much medication in treating diseases about the cervical canal. My experience has been that it is very seldom necessary to do any thing to the cervical canal. In the first place, with regard to the use of the sound, that instrument is seldom necessary in making a pelvic examination, because there is very little to be determined by using it as a
I have no special objection to the use of the probe, but it is an instrument I think is rarely needed, simply because we can make a diagnosis without it. If it is properly used, and proper precautions are taken, I do not see any special harm it is going to do. I believe in avoiding any thing that is unnecessary in the way of manipulation in these cases.

I thank the gentlemen for agreeing with me so heartily in what I have said in my paper.

Dr. John A. Lewis, of Georgetown, read the paper on Diseases of the Rectum. (See page 327.)

**DISCUSSION.**

Dr. Joseph M. Mathews: For a great many years, whenever a paper was read before our Society, or, indeed, I might say any society, upon any special subject, it was the habit of specialists to read such papers. It is like a delicious breeze during a hot day to hear from such a distinguished and sensible man as Dr. Lewis on this special subject, he being a regular practicing physician instead of a specialist, therefore I have enjoyed the paper more than I can say.

In commenting upon the paper I will take the liberty of disagreeing with him upon some points that my experience has taught me are true. In starting out he has done the specialty the credit of saying it is based upon scientific principles, and pays a compliment to the rectal specialists of America for bringing it and placing it upon this basis, for which I thank him.

Incidentally he refers to reflexes, stating that any person suffering from any complaint of the rectum necessarily is in a very uncomfortable position because of the nervous distribution. I shall try to make this more emphatic; in other words, I desire to say that the reflexes are so great from the rectum that time and again disease has been supposed to be located in other organs, notably those organs under the super-intendancy, if I may use the expression of the gynecologist, where the tubes, ovaries, womb, and vagina have been operated upon, when perhaps a little further investigation would have revealed the fact that the disease originated in the rectum.

The doctor, in speaking of the operation for fistula in ano, said that the wound should heal
by first intention rather than by second intention or granulation, and gives credit to Dr. Emmet as originating this operation. In that particular he is mistaken. It is to Dr. Lange that the operation is due. He was the first to look to the healing of fistula by first intention. As far as my experience goes the fistula that heal by first intention are very few and far between. When we remember that in the great majority of instances we have more channels than one, running perhaps in opposite directions, running down under the sphincter muscle, etc., we can scarcely get such union; for in cutting away so much tissue we can not get apposition of tissue, and it would be difficult under such circumstances to secure healing by first intention, hence Lange's operation has met with success in a few cases, but in the majority it has not.

The doctor refers to the fact that hemorrhoids can be cured without an operation. If the doctor means to say that well-formed internal hemorrhoids can be cured without surgery, I must say that I differ from him.

Dr. Lewis: I think Dr. Mathews misunderstood me. I said in my estimation no case of hemorrhoids can be cured without a surgical operation.

Dr. Mathews (resuming): I am glad the doctor has corrected me. I want to say that it is here that the general practitioner makes a mistake. For a number of months or years, as has been witnessed both in my practice and that of others, these people have tried all forms of treatment and they have failed. A pile has a pathology. There is a change of tissue. It is a tumor, and I do not think any medicine will benefit it, consequently it must be surgically treated. The doctor touched upon the carbolic-acid injection of piles. I had thought we had downed this thing some time ago, as he says rectal specialists have been battling with this subject for quite a while. I can confidently say that there is no specialist either in this country or Europe to-day in the regular profession, who believes in the carbolic-acid injection of piles. I think I state this authoritatively. Dr. Kelsey a few years ago advocated this mode of treatment and published it in his work. Later he published a small work, which was an apology for his first position, in that he has abandoned the treatment. Some four or five months ago he told me he seldom now used it.

The idea that embolism can result from the injection of a pile is not chimerical. I believe it can be demonstrated both anatomically and pathologically. Dr. Andrews, of Chicago, reports one case of embolism resulting in this way, and I will say in this connection that the profession of America are greatly indebted to Dr. Andrews for exposing those men who are traveling around the country injecting piles. According to statistics two or three more cases of embolism from this source have been reported.

The ligature, as Dr. Lewis said, is the treatment par excellence of hemorrhoids to-day.

I can not believe that the clamp and cautery have the special advantages he has mentioned. I have used them myself, and have seen other experts use them, and I must say that I believe their use is attended with danger, in that hemorrhage may result from the uncovering of an artery that has not been tied. I must say, as Dr. Lewis concedes, that if stricture is feared from the operation of hemorrhoids, it is certainly to be feared from the clamp.

He refers to Whitehead's operation. I wish to discuss it a little. Every once in a while we have a new operation for hemorrhoids and other surgical affections, and it is tried and found wanting. Whitehead has made great claims for his operation that can not be substantiated. There is danger lurking in the operation that may not be suspected. In this country rectal specialists and general physicians have stated some of its dangers; but upon the premise that he assumes so much surgery for a slight affection we condemn it. I think that I can place the matter before you in a few words when I say, why should you attempt to remove so much surface as the pile area in curing a few hemorrhoids? I say the premise is wrong. The condition he takes to be pile-bearing is in fact none at all; simply because the veins are distended with blood, varicose, if you please, is no reason why all such should be removed; this condition will right itself after the tumor is removed. This is true of every operation done by the ligature. If you examine the
rectum six months afterward you will not find varicosities; minor surgery will accomplish all that Whitehead has claimed. We escape the hemorrhage, strictures, and other dangers that I might indicate if I had the time.

With regard to fistula in ano the doctor speaks, as many have spoken before him, of the necessity of finding the internal opening to the fistula. I stated a number of years ago, in an article before this Society, that I could not understand the necessity of finding this opening. The method he speaks of was practiced many years ago by Mr. Allingham and others, before Kelsey. One thing should be observed in the operation, and that is never to leave an additional sinus, I care not how small. If an operation is done for fistula, and one branch of the main sinus is left, it is not successful, as each and all of them should be sought out.

The doctor speaks also of a very important question in the operation for fistula, and that is its connection with lung disease. He speaks plainly and to the point when he says no hesitation to operate should be indulged. If a person has a fistula that is giving him a good deal of annoyance in the way of pain or any thing else, it has been proven by the best of operators that anal wounds will heal, hence you should operate, and you rid the patient of a more painful condition than the lung affection.

He speaks of the causes of stricture of the rectum. Here I must radically differ with him. I have kept a record for the last fifteen years of cases of stricture of the rectum occurring in my hospital, dispensary, and private practice, and in the General Address on Surgery, which I delivered at Washington last year, I took the position that sixty per cent of strictures of the rectum were due to syphilis. I believe any man who will observe and trace the history and watch the clinical facts in these cases, and then by examination with his finger, will come to the same conclusion. I do not believe cancer is responsible for the great majority of cases. I do not believe that benign influences are responsible, but that we have a disease which is more deadly than smallpox, yellow fever, and consumption, or all put together, in this country, as the cause, and that disease is syphilis. It has been said by my friend, Dr. Palmer, that it is destroying more people than all of the epidemics that visit our country.

Again, I differ with him when he says that stricture of the rectum should be treated by gradual dilatation. I once said that it reminded me of cutting a dog's tail off a little at a time to keep from hurting the animal. Any physician or surgeon can by rapid dilatation accomplish in two minutes what would take him days to accomplish by gradual dilatation. As to its danger, it is chimerical. It has been my habit to rapidly dilate and break down these strictures, and I have not had a death or dangerous hemorrhage following.

As regards inguinal and lumbar colotomy, I can not conceive of the advantages of inguinal over the lumbar method. The lumbar operation is more difficult to perform. When we remember the operation of colotomy, either lumbar or inguinal, being done because the stricture is in the sigmoid flexure or the rectum, is it not possible, if we open in the inguinal region, it is more likely to be invaded by cancerous disease? Because of its locality the lumbar operation is the better of the two.

Dr. William C. Dugan, of Louisville: There are one or two points that I desire to call attention to, and one is with reference to dissection of the fistulous tract. Dr. Mathews has called attention to the mistake made by the essayist in attributing the operation under discussion to Dr. Emmet. I have done the operation several times, dissecting the fistulous tract in a few cases, and have had immediate union. It was a case of an old dermoid, which developed under the coccyx, opening into the rectum. After careful dissection, I put in deep sutures, brought them together, and the patient recovered in a very short time.

In a second case I did a proctorrhaphy for incontinence of feces; the operation extended up five inches, dissecting the structures, and making practically the same operation as in the previous case, putting in deep sutures, and securing a good result. In the second case it was an ideal operation. As the essayist has said, we should aim to secure immediate union rather than to leave patients drag through, so to speak, the granulation process, and heal by first intention.
I beg to differ with my friend, Dr. Mathews, and agree with the essayist in regard to colotomy. The objection Dr. Mathews urges against inguinal colotomy is that you are so apt to find cancerous tissue invading the sigmoid flexure; a mistake that we make in a case of that kind is by going higher; if we draw well down on the sigmoid flexure we thereby prevent collapse.

Treves has demonstrated that both the ascending and descending colon have a meso-entery. They are not simply covered anteriorly by the peritoneum, so the great danger in opening the peritoneal cavity by the posterior method is that it is certainly a difficult operation.

The mortality statistics as found in old works are misleading. You find in some books that the mortality of inguinal colotomy is placed at about fifty per cent. I desire to quote the statistics recently compiled by my friend, Dr. Strauss, of St. Louis, during a recent visit abroad. He reports from the operations of Allingham, Treves, Fritz, and a great many others, a mortality of a little over two per cent against the appalling mortality of lumbar colotomy, which is from twenty to fifty per cent.

I think that the external and internal sphincters have little to do with the control of the feces. The circular fibers are higher up, and as long as the disease does not extend higher than two inches you are not apt to interfere with the function of the rectum.

Dr. John A. Lewis, Georgetown: In regard to the authorship of the operation I did not claim any thing original in the paper. I have searched the journals for twelve months, have taken every one of them, and of course I have authority for what I have said.

In regard to the statistics concerning the pathology of stricture of the rectum, if you read the journals you will notice that Dr. Kelsey reports 400 cases very recently. Of this number there were 33 cases of stricture of the rectum. Of 39 cases only 11 were due to venereal trouble. It is not upon my own authority that I mention this. I believe that a majority of the profession have believed that they were due to syphilis. I felt refreshed when I could make this correction in behalf of humanity.

Dr. E. R. Palmer read the Report on Genito-Urinary Diseases for the year. (See page 332.)

**DISCUSSION.**

Dr. H. H. Grant, of Louisville: In thanking Dr. Palmer for the clear exposition of the subject he has made, and the very perfect manner in which he has described to us the progress of surgery in respect to this particular department, I desire to say I regret very much to hear him make the apology in the beginning that there was scarcely anything new. Those who have listened to the manner in which he described all the particular points, that are as old now as they were ten years ago, are disappointed in that he did not indicate to us the particular way by which the unfortunate may hope for relief. Notwithstanding the fact that the doctor disclaims almost any particular advantage with respect to the treatment of strictures of the urethra, he has omitted calling attention to the fact that very recently a production has appeared in our literature in which a large number of these infirmities attributed to stricture are the result of disease of the prostate. Dr. Gouley has produced a series of papers referring to disease of the prostate, which have explained the way a very large number of the affections that were originally ascribed to prostatitis, stricture, inflammation of the ducts, seminal vesicles, etc.

With these lines before us we can possibly make a diagnosis between these conditions and those ascribed to strictures of large caliber. Dr. Palmer refers to prostatitis, but only in an indefinite sort of way. He does not give any particular means for conditions of this kind, and leaves us practically in the dark. In Dr. Gouley's papers a new treatment is indicated; not that it is entirely new, but it is very appropriate to conditions that have been originally managed by dilatation of the urethra or by cutting strictures that were imaginary and some that actually existed.

This is a long and interesting subject; one that is perhaps almost impossible to elucidate, yet it is a positive fact that a large number of the conditions attributed to chronic gonorrhea are lesions susceptible of treatment directed especially to the locality in which they are situated. I regret that the doctor did not indicate to us how to manage these special lesions.
With respect to the management of syphilis, there is one point that I hesitate to direct the attention of the Society to, and it is the question of the time at which mercury should be administered after the diagnosis of the disease has been made. We all like to make a diagnosis of the disease as early as possible, in order that mercury may be administered at once. There is no question but what the virulence of the disease is aggravated every hour by the condition going on untreated. There is no other means so efficient in reducing the virulence of the disease as the prompt administration of mercury. When it is possible for specialists in genito-urinary surgery to diagnosticate the existence of this condition at the earliest possible moment, it is possible to mitigate the severity of the affection. It appears to me that every one should bring home to himself the nature of this condition. It seems to me that even if I fell from grace myself, I should desire the administration of mercury at the earliest possible moment, without waiting for time to demonstrate what accuracy of diagnosis had failed to establish. If those gentlemen who are pursuing diligently the study of this affection will only administer mercury at the earliest possible hour, rather than wait to establish an accurate diagnosis, the virulence of the affection and the great penalty that is inflicted upon not only the sinner, but human race, will be largely mitigated.

Dr. E. R. Palmer, in closing the discussion, said: I had to time myself on the paper. I read it in my office, and found that it about covered the limit allotted to me. I had before me on my desk Oberlaender's article on the prostate, and Gouley's series of articles published in the New York Medical Journal. I felt I consumed all of the time I had any right to. I will say this, that I did not come before you to advocate, to instruct, or to give any of my own ideas, but I followed what was my conception of the duties of the chairman of the committee, namely, to clip extracts from various medical journals of what seemed newest and best to the general practitioner, and to present them in as succinct a form as possible.

In reference to the matter of time in the treatment of syphilis, I would say that one of the great obstacles to doing right is this: I have never yet met a man who had either gonorrhea or syphilis but what was as stubborn as an ass. They talk of jumping into the canal; they listen to no reason, sense, or any thing else. I believe in administering mercury and treating syphilis the very moment I am sure the sore is indurating and that my diagnosis is correct; but so sure as you do this and the man shows no secondary lesion, any macule, any adenitis after a few months' time, no matter how much confidence he placed in you at first, and your ability as a physician, he will reason to himself that he never had syphilis, and some smart doctor will tell him that he never had it. He quits treatment, and blames you for having given him mercury. He develops strictures of the rectum, locomotor ataxia, and internal brain lesions of a more profound nature because treatment of the case was not persisted in. When the eruption comes you say to the patient, Look at these spots on your abdomen. Here is one, and there is another. If he comes back months afterward in doubt because free of signs, you turn to your record book and find that on 14th of March malacule were seen by you, and you tell the patient that he has got the disease, no matter what the doctor or specialist to whom he went may say. If it were left to me, I would give mercury from the very moment the induration begins for its specific effect; but when I look to my own preservation, when I weigh the average idiocy of the diseased man, I am obliged to wait until I prove that he has syphilis, then I put him on mercury.

[DUBOISIN AS A SEDATIVE AND HYPNOTIC. — Ostermayer regards the sulphate of duboisin as superior to hyoscyne in not having the inconveniences of the latter drug. It is chiefly a hypnotic, producing sleep in from twenty to thirty minutes, and is to be given in doses varying from 1 to 3 milligrams, according to the character of the case. It is said to produce no dangerous or disagreeable symptoms, and, although continuous use produces tolerance, by leaving it off for a short time the full effect can be again obtained.—Times and Register.]
Reviews and Bibliography.

By Edward Reynolds, M. D., Assistant in Obstetrics in Harvard University, etc. With one hundred and twenty-one illustrations. 421 pp. New York: William Wood & Co. 1892.

It is not expected of an author at this date, writing a work upon any department of obstetrics, that he will add a great deal that is new. His undertaking will be justified if he shall have selected the things most deserving to be told, and told them well. This justification applies to "Practical Midwifery." The most rigid and unfriendly criticism could find little to condemn, and while we would not place it among the classics, we must accord it a high degree of merit. The style is a little complex and indirect. In literature the robust mind demands that thought shall be clothed in language that requires some effort to fully comprehend, but in scientific description almost the whole reading world requires that the style shall be terse and direct, the sentences as short as practicable, and the language plain. The present work falls just a little short of this rule. We pass over "pregnancy" and "labor" as being entirely in line with accepted teaching until we come to "antisepsis and preparation for labor;" and here we are glad to see that the author takes ground far within the extreme measures, recommended so confidently, one might say so arrogantly a few years ago. The injunction is absolute cleanliness at the beginning of labor, little interference during labor, and almost none, except to perpetuate the cleanliness, afterward.

In regard to the mechanism of labor we might take issue with the author in regard to the way in which the fluids act in dilating the os, but the subject is not to be made plain without cuts. On the long mooted question of the cause of internal rotation we must give the author credit for being a little more unintelligible than any we have yet seen.

With the article on the treatment of mastitis we are delighted. In the abscesses, or rather the threatened abscesses, that promise to result from milk incarcerated in the glands, the author recommends massage as useful above all things. From a midwife who was one of Kentucky's pioneers we have heard from childhood the declaration that in every case of abscess of the breast the attendant was to blame, for that, if massage was commenced in time and pushed with proper diligence, no abscess should occur. This, of course, can not apply to interstitial abscesses. This one caution should, however, be impressed upon the accoucheur, when massage is once begun it should be persisted in until all tenderness and all perceptible tendency to abscess formation have disappeared. It is even a capital prophylactic measure.

The author's method of treating sore nipples, which indeed is the approved method, we think might be improved upon. If the nipple is washed just after nursing, preferably with water to which a little salt has been added, to hinder maceration, and then covered in with a closely-fitting cap of beeswax to be removed when the child nurses, few cases will be met that do not rapidly heal. It seems to be the alternate drying and moistening that does the greatest harm, and by preventing moistening except by the sebaceous secretion of the nipple itself, the most favorable condition is provided.

We can not, however, point out all the good points of a very excellent work, and we can only say to any practitioner, it will well pay you to read it.

D. T. S.

On the Medical and Surgical Uses of Electricity.

It is no exaggeration to say that we have here the very best work that has been produced on medical electricity. The whole tone and plan of the work is deserving of commendation. The author starts out first to make the practitioner fully acquainted with the physics of electricity, then to familiarize him with the principles of its use, and finally gives an exhaustive detail of its practical application. In all these there is evidence of the master. It might be objected that the many pages devoted to the physics of electricity were better given
in a separate work more convenient to handle; but to this is the answer, that many who would be tempted to the employment of electricity and who knew nothing of its right use would, in this part, find a reminder of their ignorance every time their text-book was referred to.

As usual with nearly all special writers, the author perhaps sees more in his particular department than will be realized by one who takes a wider survey. Few will find in actual practice so small a number of failures as they would be led to expect from these pages; but this is not more than can be said of almost any work on therapeutics.

D. T. S.

The Mediterranean Shores of America. Southern California: its Climatic, Physical, and Meteorological Conditions. By P. C. Remondine, M. D. (Jefferson), member of the American Medical Association, of the American Public Health Association, of the San Diego Medical Society, of the State Board of Health of California, Vice-President of the California State Medical Society, etc. Fully illustrated. 160 pp. Philadelphia and London. 1892.

To say that this is a charming work would be doing it but scant justice. In writing it the fervid fancy of the author has evidently drawn from the deepest sources of inspiration his climate affords. Having apparently plucked a feather from the wing of the Mexican eagle, cousin to the condor, he seems to have dipped it full into golden colors, or possibly charged it from the blushes suffusing the face of the evening clouds when kissed good-night by the retiring sun, as half disrobed he prepares to encouch his swelling form in the placid Pacific; and, so supplied, he has painted Southern California in the hues that nature doubtless intended, and which to boomers of real estate and health resorts must be quite agreeable.

Badinage aside, no one else has written so charming a description of Southern California, and one too that, in its descriptive parts, can not well be assailed on the score of inaccuracy. Perhaps there is not a detail that is not true, and yet the effect is so skillfully exaggerated that there are few readers who would not find the reality a disappointment.

As to cultivated flowers and fruits, Southern California doubtless bears the palm from all the earth beside, but when we come to test the climate through all the seasons, one has to be possessed of a constitution refractory to insidious, chilling fogs and breezes, or an exuberance of fancy that is a ready substitute, not to feel very often that the climate is not constantly ready to work its miracles.

Whoever has lived in Texas or Colorado has seen many a bracing day that will compare most favorably with California's best, and many a night that will surpass it. It is only in the mildness and equableness of her winters that California is pre-eminent. There seems to be something in the climate of Southern California that inspires exaggeration.

Most readers would not be disposed to relegte the majority of cases of pneumonia to the category of mistakes of diagnosis, as the author seems to do, to get rid of inferences otherwise unavoidable; nor in the matter of recovery from wounds do we think it yet necessary to reconstruct medical jurisprudence to adapt it to the alleged extraordinary endurance of the people who have gathered about San Diego. Our own remembrance is that bullets were very fatal along in the sixties throughout that region.

D. T. S.


In favor of this book it can be said, that its teachings are in the main sound, that the print is large and clear, the style natural and lucid, its make-up attractive. Against it may be questions of its adaptability to the purposes for which it is meant. Every doctor knows how long it takes to gain a clear idea of any given disease with all the aid of illustrations, elaborate discussion, and clinical demonstrations. When, then, one attempts to treat of the great class of eruptive diseases, embracing itch, herpes, different forms of eczema, and erythema, or scarlet rash, all within a dozen pages, he is setting forth knowledge that will, in our opin-
ion, be of value to very few mothers. So with much of the rest of the work. There is either too much of it or not enough, the former rather. It is far easier, however, to criticize than to produce a work on medicine in any of its departments that shall be adapted to the popular comprehension in the present state of the general education. However, the mother may find much in it that is helpful. D. T. S.

Abstracts and Selections.

Effects of Sulfonal, Etc.—In the Journal of Mental Science for the current month Dr. Carlyle Johnstone records his observations on the effects of sulfonal on fifty patients suffering from various kinds of mental disorders, including general paralysis, melancholia, and mania. His experiences with the drug point to the conclusions that, in properly regulated doses, it is an efficient hypnotic, and, compared with that of other hypnotics, its action is fairly certain and constant. The sleep produced by it is natural and undisturbed by dreams; it has no injurious effect upon the appetite, circulation, respiration, or temperature, and the general health does not suffer under its use. After a time the dose may be reduced, or it may be discontinued, and the patient still continue to sleep well. Dr. Johnstone also found that it had a distinct sedative action in mental excitement and distress, and could be employed with great benefit in cases of insanity, especially such as are of recent or acute character. Its complete tastelessness also is recommended in such cases, allowing its combination with food, or in milk, in such a way as to escape the notice of the patient. The chief drawbacks were found to be its slowness of action, and often the persistence of its soporific effect during the succeeding day, together with, at times, confusion, giddiness, and fatigue. After repeated doses a dreary confusion was noticeable, and subsequently slight weariness and fatigue, followed in a few days by enfeeblement and shakiness of motion, but nothing occurred which could be called an alarming symptom. As a rule, indeed, the mental condition improved, the excitement, irritability, and motor restlessness being diminished, and the wretchedness dispelled. It will thus be seen that the writer's conclusions are in accord with the majority of those already published, and that, while regarding sulfonal as by no means a perfect hypnotic, he is inclined to give it a very important place in the treatment of sleeplessness and restlessness generally. The best doses he found to be between thirty and forty grains, and it should be given just before the patient lies down. The freedom of the drug from taste or smell, as has been said, is one of its advantages, and renders its administration easy. (Lancet, January 23, 1892.)

Dr. Barclay, of Banff, the president of the Aberdeen Medical Society, in an address on the Recent Drugs in Medical Practice, said: Dealing first with hypnotics, he found the bromides useless, but of benefit when combined with the tinctures of hyoscyamus, in infantile convulsions, menorrhagia, and epilepsy. Ten to fifteen grains each of bromide of potash and antipyrin were especially efficacious in epilepsy. Chloral hydrate, if continued for any time, required to be used in dangerously large doses; amylene hydrate, sometimes induced sleep, but was uncertain in its action; and the same results occurred in the use of urethan. Paraldehyde, he found satisfactory, but chloralamide not infrequently induced delirium and disturbed sleep.

Sulfonal had proved the most successful of the hypnotic group, without any unpleasant effects, and was especially beneficial in cases of delirium tremens and asthma. Passing next to antipyretics and analgesics, he had found gelatinum useless. Antipyrin acted both as an analgesic and an antithermic, but was liable to be followed by great depression, and on this account he deprecated the existing freedom of its sale by druggists without the prescription of a medical man. Antifebrin was a valuable antipyretic, but of little use as an analgesic.

Both as a febrifuge and an analgesic, Dr. Barclay had found phenacetine most useful, and he adduced several striking examples of its value. The addition of quinine enhanced its effects, and this combination he eulogized in the treatment of acute rheumatism and herpes zoster. Exalgine had acted well as an analgesic, but required careful handling.

The president next spoke of saccharin, oxalic acid, and salol. He said saccharin and salol in five-grain doses and oxalic acid in one-half-grain doses had been very successful in the treatment of chronic cystitis. Salicylate of ammonia had proved of value in cases of Bright's disease, by causing the disappearance of albumen from the urine. In phthisis, creosote was not readily borne, but the oil of eucalyptus gave good results, and in the night-sweats he had found the administration ofagaric acid and agamicine very serviceable.

Ichthyol and aristol in ointment did well in the treatment of psoriasis. (British Medical Journal.)

The Hungarian State Health Commissioner, in a report to the Minister of the Interior
Bacteriology of Endo-metritis.—In order to investigate the bacteriology of endo-metritis, Dr. Brandt, of St. Petersburg, recently examined twenty-five cases, including hemorrhagic, catarrhal, gonorrheal, and septic forms. After carefully cleansing the external genitals, the vagina, and the cervical canal with a solution of corrosive sublimate of the strength of 1 in 1,000, with alcohol and with ether—preliminary bacteriological observations on scrapings from the cervical canal invariably giving negative results—the internal surface of the uterus was scraped with a curetette, and dry preparations as well as cultures in agar and gelatine were made. The plate method was likewise employed, as were inoculations in animals. The portions of mucous membrane brought away were also carefully examined with the microscope. In almost all cases microbes were found, both pathogenic and non-pathogenic, the former, however, preponderating. Of these, both cluster and chain cocci were met with; among the non-pathogenic bacteria there were occasionally bacilli, but most commonly cocci. It was remarked that cases where pyogenic microbes were found were not clinically distinguishable from others where none could be detected; these pyogenic microbes, however, when injected into animals invariably produced both local and general symptoms, such as abscesses and a rise of temperature. Sometimes, but by no means always, microbes were seen in the substance of the mucous membrane.—London Lancet.

Passage of Tubercle Bacillus from the Mother to the Fetus.—Birch-Hirschfeld and Schmal have recorded a case which they consider is the first in which it has been definitely shown that in the human subject tubercle bacilli can pass from the mother to the fetus. The patient was a young woman who, shortly after the commencement of her first pregnancy, began to exhibit symptoms of incipient phthisis. The disease assumed an acute form, and progressed so rapidly that the patient died during the seventh month of her pregnancy. Immediately after the death of the mother the child was removed by the operation of cesarean section. A post-mortem examination was made on the body of the mother. Advanced tuberculoid changes were found in the lungs, and also some miliary tubercles in the liver and other organs. The child had been felt to move after the death of the mother, but by the time the operation had been performed it was found to be dead. The thorax was at once opened, but the lungs appeared to be quite healthy. The body was then removed to the laboratory, the surface of the abdomen washed with perchloride of mercury, and the cavity opened by means of sterilized knives. No evidence of tubercle could be found in any of the organs. Small pieces of the liver, spleen, and kidneys were removed with sterilized instruments, and placed in the abdominal cavity of two guinea-pigs and a rabbit. One of the guinea-pigs died in fourteen days; miliary tubercles were found in the peritoneum and large omentum. The second one was killed about six weeks after inoculation, and the same appearances were noted. The animal had appeared ill, it was feverish, and emaciating rapidly. The rabbit lived considerably longer—three months; after death tubercles were found in the liver and lung. From these experiments it was evident that although no tubercular le-ions could be found in the organs of the child, yet the latter were capable of infecting animals; and, had the child survived, it would have undoubtedly developed tuberculosis at an early age. It is a point of great interest to read that tubercle bacilli were found in the umbilical cord and in the blood of the umbilical vein.—Ibid.

The Lactic Acid Treatment of Diarrhea.—In a number of cases of diarrhea due to various causes, including phthisis, typhoid fever, erysipelas, and intestinal catarrh, which Dr. Schegoleff, according to a paper he has published in the Medisinskoe Obozrenie, treated by means of lactic acid, a successful result was obtained in two days in fifteen, in three days in five, and in four days in three. In twelve cases of exanthematous typhus the treatment failed to have effect, but in thirteen others it was successful. The preparation used was an aqueous solution sweetened with syrup. In this form the drug was well tolerated, and no unpleasant symptoms were produced. The quantity of lactic acid given per diem averaged about 115 grains, or little more than half that given by M. Hayem, who first recommended this treatment, and this may perhaps account for some of the failures of the Russian practitioner. Acting on the advice of the latter, Dr. Chernisheff, who has also published an account of his cases, prescribed lactic acid in three cases of acute intestinal catarrh, in six of chronic gastro-intestinal catarrh, also in eight of diarrhea due to phthisis, and in three of diarrhea compli-
cating Bright's disease. In all these cases good, sometimes striking results were obtained. Thus several cases of simple catarrhal diarrhea were relieved in from two to five days. In six cases of non-specific diarrhea in phthisical persons the diarrhea ceased the day after the commencement of the treatment. In one case of chronic gastro-intestinal catarrh the diarrhea ceased on the third day from the commencement of the lactic acid treatment, but reappeared when it was stopped. Two days more of the treatment served to effect a more permanent cure. Notwithstanding the observations of MM. Hayem and Lesage on the value of lactic acid in the diarrhea with green stools of young children (see The Lancet, vol. i, 1887, p. 1149, and vol. ii, 1887, p. 1020), according to whom lactic acid destroys the bacilli on which the condition depends, this medicament is rarely used, and indeed is not generally known to have any effect on infantile or other diarrhea.—Ibid.

DISTANT ACTION OF GLYCERIN IN SUPPOSITORYS, ETC.—Mrs. Y., aged forty, a multipara, had carcinoma of the fundus of the uterus for more than one year, and during the last three months of her life all her alvine discharges were passed through the uterus and vagina. Neither cathartics nor enemata produced any fecal discharge from the rectum.

On one occasion, when she became uncomfortable from accumulation and hardening of the discharge, I introduced a large glycerin suppository into the rectum. Within half an hour it produced a copious and semi-fluid stool through the uterus and vagina, but no discharge whatever from the rectum.

I subsequently had the privilege of an autopsy, Dr. Theodore H. Seyfert assisting me. We found that the diseased fundus of the uterus had become adherent to, and ulcerated into the narrowed colon at its sigmoid flexure, almost severing the continuity, and detaching the mucous lining of the colon from that of the rectum, and totally obstructing the upper end of the latter by organized deposits.

As far as one instance can, this one appears to prove that the effect of the glycerin, though originating in the rectum, is not confined to it. Dr. Horace Y. Evans, Medical News.

NEURITIS IN DIABETES.—In the last number of the Neurologisches Centralblatt there is an abstract of a contribution by Eichhorst to the subject of the loss of the patellar reflex in diabetes mellitus. It is based upon the observation of two cases during life, and an examination of the nervous system after death. The first patient was a female, forty-five years of age, who had loss of knee-jerks, slight girdle feeling, no Romberg's symptom, and no ataxy. The urine contained a considerable quantity of sugar. The necropsy revealed atrophy of the pancreas and an unusually large size of the nuclei of the liver cells, but the central nervous system showed no change. In the crural nerves, however, and in the vagi there was a condition of well-marked parenchymatous neuritis. The sciatic nerves were more slightly affected, while the median nerves were normal. Similarly, in the second case, there was a widespread parenchymatous neuritis affecting the crural nerves and also the sciaticus, while the median nerves were normal, and the central nervous system showed no change.

The absence of the knee-jerk in diabetes, it is further said, is to be ascribed in some cases to a functional disturbance; in others, as the above, to a change in the anterior crural nerve; and the curious statement is made that if the knee-jerk disappears and returns in the course of the illness, the cause is to be regarded as a functional disturbance. No one will deny that in such a case, granted the reliability of the observation, there is a disturbance of the function of the anterior crural nerve present. But so there is in the cases in which there is inflammation of the nerve, and it seems to us unwarrantable to assume that, because the normal condition becomes re-established, there may not have been a structural change in the nerve underlying the evidences which it presented of disordered function.—London Lancet.

FILARIASIS.—Among twenty-six officers and colonial officials admitted to the Val-de-Grace Hospital between May 1, 1890, and February 1, 1891, Professor Moty observed four cases of the above disease, and two other cases in the parents or friends of the patients. Four, however, of those admitted to the hospital had been abroad for so short a time that they may be left out of the calculation, leaving six cases among twenty-two persons who had spent a considerable time in the colonies. In spite of its frequency, this disease does not appear to be generally recognized abroad, as in none of the above cases had it been diagnosed. It was only upon undertaking an operation for the radical cure of a supposed hernia that the tumor was found to consist of dilated lymphatics. Professor Moty came to the following conclusions: That filariasis is an antiseptic parasitic disease due to the presence of the filaria sauguinis hominis; that it is of frequent occurrence in the French colonies, and has been recently met with in New Caledonia. It most often appears as an enlargement of the glands and lymphatics of the groin and spermatic cord, due to the irritation of the filaria and its
embryos. It can be recognized by such symptoms as chyluria, hematuria, etc., but the diagnosis in each case should be confirmed by the detection of the embryos in the blood. Neither internal nor palliative treatment is of the slightest use. Excision or amputation is necessary in severe cases, and is attended with the happiest results, the removal of the hypertrophied tissue causing the adult filaria to disappear.—Ibid.

The Prevention of Rabies.—Were it not that experience has fully proved, both in England and on the Continent, the efficiency of the muzzle as a preventive of the spread of hydrophobia we might excuse the delusion that the disease, lately so prevalent in this country, has died a natural death. The facts mentioned in the Lancet of April 5, 1890, however, show too close a connection between the prophylactic method and its effect to admit of any real doubt upon the subject. The past year has been a period of probation. The immunity conferred by the muzzling order has not, perhaps, unnaturally been taken as justifying its discontinuance in favor of the less irksome system of collar registration, and so far, there is reason to believe, with entirely satisfactory results. In this way such cases of rabies at least as arise among stray dogs, and they comprise the greater number, should, if the regulations are strictly enforced, be held in check. Of the efficiency of the muzzling system and the justice of its application two years ago we cannot entertain a doubt. In its absence registration is and must remain for some time to come quite indispensable. It is difficult indeed to see how, without some such preventive arrangement, security against the disease can be relied upon. We trust, moreover, that, on the least sign of a recrudescence of the disease, in the interest of our faithful friends, the dogs as well as of the human race, muzzling may again be strictly enforced.—Ibid.

Distinctions between the Bacillus of Typhoid Fever and the Bacillus Coli Communis.—At a meeting of the Société de Biologie, Dubiel (La Médecine Moderne, No. 43, 1891, p. 745) reported that in making comparative experiments with the bacillus of typhoid fever and the bacillus coli communis, he found that both organisms caused the fermentation of glucose in about equal degree, the colon-bacillus, however, giving rise to the formation of a larger percentage of lactic acid. In consequence of this difference, the typhoid-bacillus but slowly causes the coagulation of milk, while the colon-bacillus produces the same result more speedily.

Before the Académie de Médecine, Roux and Roullet (La Médecine Moderne, 1891, No. 43, p. 741) maintained the identity of the bacillus coli communis and the bacillus of typhoid fever. The apparent differences that exist are considered as dependent upon the varying conditions to which the organism may be exposed.—Medical News.

Ptomaine Poisoning.—An interesting condition, apparently resulting from the ingestion of unwholesome food, is described by Dr. Guttmann in the Berliner Klinische Wochenschrift, and a short abstract of the case is given in a recent number of the Centralblatt für Klinische Medizin. A man, aged thirty, after enjoying part of a somewhat “high” goose, suffered from symptoms of gastric disturbance accompanied by rigors. In five days he was unable to raise his eyes, and he had diplopia and swelling of the parotid and sublingual glands. Twelve days from the commencement nearly all the branches of the right third nerve were affected, as well as the fourth and sixth on the same side. On the left side the condition was similar, but there was no ptosis. The pupils, however, were normal, vision was good, and there was no optic neuritis. There was no paralysis of accommodation. Except for some paresthesia in the left hand there were no other signs of disease, and in four weeks’ time the patient had recovered perfectly. Dr. Guttmann concludes that the case was one of meat poisoning, and he mentions the fact that nuclear palsies, although no cases of complete ophthalmoplegia, have been described as occurring under similar circumstances.—London Lancet.

Perforative Aortitis.—Oliver has recorded the case of a man, aged thirty-six years, who thirteen years previously had an aggravated attack of rheumatic fever. Murmurs indicative of the existence of aortic obstruction and incompetency, of mitral incompetency, and of pericarditis, were heard, and the heart was hypertrophied. Some time later the patient rather suddenly died. At the autopsy the pericardium was found occupied by a clot entirely surrounding the heart. The heart itself was dilated and hypertrophied. The mitral orifice was dilated, the valves normal. The aortic valves were incompetent. The aorta, just beyond its origin, presented a pouch-like dilatation. Over a small area between the mouths of the coronary arteries, extending upward for about an inch and a half, the lining membrane of the aorta was red, softened, and ulcerated, and in two places gangrenous. From the center of this area a small pouch bulged outward. The walls of the pouch
were thin and soft, and perforated at its base by an opening as large as the head of a pin. An atheromatous plate lay close to the orifice of the left coronary artery. Microscopic examination confirmed the macro-copic evidences of the existence of an ulcerative aortitis, and disclosed in addition the pre-ence at the focus of inflammation of considerable numbers of bacilli resembling those of anthrax. There was no history or knowledge of infection. — Ibid.

"Chemotaxis" vel "Chemotaxis."—As science advances and new ideas spring from new observations, fresh terms have necessarily to be employed to denote phenomena that have previously passed unnoticed. But investigators who employ such terms should be careful to see that they are well understood by those who listen to expositions or peruse writings which contain them. It is in the interest of the many who desire to have a clear comprehension of the knotty question at present dividing the pathological world that we would invite the next "phagocyst"—another new term (!) necessitated by the struggle that is now in progress— who speaks in the debate at the Pathological Society, to condescend to state explicitly the precise etymology of the phrase that lies at the root of the controversy, and concerning the spelling and pronunciation of which there seems to be as great a difference of opinion as there is between the two opposing camps on the main question. Of course it may be said that it does not matter an "iota" if that useful little vowel be omitted, and the word of five syllables degraded to one of four; but there must be some reason for its retention in the minds of those who do retain it, or for its rejection in the minds of those who discard it. Nor is this all. The ordinary man would like to go a step farther, and ask the expert how the two parts of this compound word hang together. By a stretch of imagination he can conceive that "taxis" may imply the marshaling of the phagocyte forces to resist the invader; but then the chemical influences which he may suppose to be denoted by the first root are considered to act either "positively" in attracting or "negatively" in repelling the martial leucocyte. So that "taxis" can not be used in its classical sense. It is, perhaps, unfortunate that the discovery that some substances attract and others repel leucocytes (the term "chemotaxis" was in the first instance, we believe, applied to micro-organisms) should have led to the use of the adjectives "positive" and "negative." But we suppose there is no help for it now. Only it would be satisfactory to know how this important word is to be spelt, especially if it is going to assume a permanent place in pathological terminology. We should like to add also a protest against the lax way in which such words as "immune," "vaccination," and the like are being used by pathologists. For it would seem that the precision with which they conduct their scientific re-searches is somewhat lacking in their language. Can it be because science is replacing the old-fashioned classical education in primary schools that so little regard is often paid to etymology by scientific men? — Ibid.

TREATMENT OF DIPHTHERIA.—Smith has successfully employed carbolic acid by continuous inhalation in seventeen cases of diphtheria. He ascribes the good results largely to the method of application. The patient is placed in bed, lightly clad, and made to maintain the recumbent posture. Over him is placed a tent, made of a sheet, closed on all sides except in front. Cloths, about a foot square, soaked with a mixture of carbolic acid, one part, oil of eucalyptus, one part, and turpentine, eight parts (or less, according to indications), are hung about the patient while the surrounding air is constantly kept impregnated with the vapor of steam. The cloths are to be resoaked as they become dry. The patient should breathe through the mouth. If necessary, the nostrils may be loosely plugged with cotton wool. The inhalations do not counter-indicate the employment of other therapeutic measures. Should there be depression, alcohol, digitalis, bella-donna, or ammonia may judiciously be administered.

BROMOL (OR TRIBOMOPHENOL) AS A LOCAL ANTISEPTIC.—C. Rademaker recommends for wounds and ulcers (Jour. de Medecine de Paris):

Bromol...................................... 5 grams; Olive oil.......................... 150 grams. M.
Bromol...................................... 4 grams; Vaseline.......................... 30 grams. M.

MR. HUTCHINSON ON THE GALVANO-CAUTERY LOOP.—In a recent article on the Surgery of the Tongue (British Medical Journal, December 7-12). The galvano-cautery loop is a very ingenious instrument, but far inferior for all practical purposes to the cold wire. He never employs a chain or any complicated apparatus. His objection to galvano-cautery is the tendency to secondary hemorrhage.

DIPHTHERIA.—Rademaker recommends the following in the local treatment of this disease (Jour. de Medecine de Paris):

Bromol................................. 1 part; Glycerine.............................. 25 parts. M.
KENTUCKY STATE MEDICAL SOCIETY.

Since our last issue the thirty-seventh annual session of the Kentucky State Medical Society has become a thing of the past. In scientific interest the session ranks high, an unusually large number of well-considered and well-written papers having been read. But for some reason, perhaps the difficulty or fear of speaking in a large hall by those unaccustomed to such effort, the discussions were few and brief to a degree that will give the coming volume of Transactions a look of thinness which no manipulation of type or skill in padding can charm away.

Few measures of extra scientific interest were up for discussion. The proposition to establish county societies as adjunct to the State association passed, as it deserved to do, by a large majority.

The reception at the Galt House was a brilliant success, and several dinners and private entertainments were got quit of with pleasure to the guests and credit to the entertainers.

The election of Dr. Arch. Dixon to the presidency is unanimously commended, and does honor to an old and distinguished worker for the Society's good.

President Brown received unstinted commendation for the dignity with which he invested the session, for his courtesy to the Fellows, and the wisdom and justice of his rulings. His address on the Uses and Abuses of Medicine, which we are fortunately able to put before our readers in full text, will be read with great interest by the profession far and wide. It is pointed and pithy, and marks out with unerring precision the pathway 'twixt ancient superstition and modern fad which every conscientious physician seeks to find and follow. As Pope said of literary style, so Dr. Brown would say of therapeutic devices:

"Be not the first by which the new are tried, Nor yet the last to lay the old aside."

On the evening of the delivery of the president's address, the Society and visitors had a rare oratorical and scientific treat in the address of the Rev. C. J. K. Jones, D. D., of Louisville. The effort was extempore, if not impromptu, and can not be reproduced. If it could be, our readers should have it in full. It was a witty, eloquent, and logical arrangement of ancient and modern folly in medicine and religion in the name of modern science, philosophy, reason, and common sense.

At the close of the exercises the Fellows were given a hearty Kentucky collation at the offices of Drs. E. R. Palmer and Turner Anderson.

Scientifically and socially the Louisville meeting was a shouting success, and it is to be hoped that our country friends will grant us oftener the pleasure of their company.

The American Practitioner and News presents in this issue four of the papers read, with a full stenographic report of the discussions thereby excited, and coming issues will set before our readers the proceedings in their entirety.

We desire here to return our thanks to the authors for the readiness with which they have put their manuscripts at our disposal.

CARL SIEGMUND FRANZ CREDE, one of the greatest obstetricians and gynecologists of his time, died on March 31, 1892. He was born in 1819, and after a successful career in several medical offices and chairs succeeded Jörg in the Chair of Midwifery at Leipsig in 1856. This post he held till April, 1887, when illness forced him to resign.
He was a great and original worker in his chosen specialties, having introduced several new and valuable measures; but his chief claim to fame is based upon his method of placental delivery. However modified by other workers, the Credé method of placental extraction will give him a name in obstetric literature for all time.

Notes and Queries.

Tuberculosis in Jersey Cattle; Tuberculin as a Diagnostic Agent.—Some instructive reports by experts and a judicious editorial upon an outbreak of tuberculosis among a herd of Jersey cattle, owned near Philadelphia, are published in the Medical News (March 26, 1892). The herd, known as the Clairemont, was established about 1882-83, and springs from a number of imported cows bought at that time. Frequent additions to the herd have been made from time to time of animals bought in various places, and none but the choicest individuals have been selected, for which high prices have been paid. All of the leading strains of Jersey bulls have been used. Every precaution has been taken to preserve the health of the stock and to increase their constitutional vigor. In-breeding has never been practiced, and the stables and animals have always been cared for in the best manner.

The herd has been regularly examined by experts, and the present outbreak of tuberculosis was recently discovered. In the rare cases in which the disease has heretofore been detected, the affected cattle have been destroyed at once, and their places in the stable disinfected.

The use of tuberculin as a diagnostic agent was an interesting feature in this outbreak. Dr. Pearson, of the veterinary department of the University of Pennsylvania, was requested, several weeks ago, to examine a cow in this herd which did not seem to be doing well, and found it suffering from tuberculosis. The animal was killed the next day, and the diagnosis was confirmed by the post-mortem examination. Thereupon he made a careful physical examination of the entire herd, and found five cows affected with the same disease, all of which were promptly destroyed. A short time after this, a fat cow that would not breed was killed for beef, and it was discovered to be in a highly tuberculous condition. This caused him to suspect that the disease might be more prevalent than he heretofore had reason to suppose, and with the object of detecting the affected animals it was decided to use tuberculin as a diagnostic agent. In all, seventy-nine cattle were tested with tuberculin, and of these thirty reacted in a manner that was interpreted as indicating the existence of tuberculosis. Six of these were slaughtered, and of this number five presented macroscopic evidence of the existence of tuberculosis; in regard to one animal there was some doubt, which a microscopic examination was expected to set at rest.

It was decided to kill all the suspected animals, to place the remaining healthy animals in disinfected stables, to have them frequently examined, and kept strictly apart from other animals.

The ultimate result in this instance should be instructive, as throwing further light upon the value of tuberculin for diagnostic purposes, and upon the possibility of thoroughly eradicating tuberculosis from a herd where it has once established itself. The example of the owner of the herd is a good one, and his action was at once public spirited and intelligent.

This outbreak of tuberculosis calls to mind similar ones which have occurred from time to time among herds of Jersey cattle in this State, herds which, as with this Clairemont herd, were supposed to be under the best hygienic conditions. The questions of the ways by which tuberculosis is acquired, of the necessity for the inspection of meat and dairy products, of the assumption by the State treasury of the loss entailed by slaughtering infected animals, have occupied these columns at various times.

Last September we reviewed editorially the subject of tuberculosis in all its relations, as discussed at the International Congress of Hygiene; and, in the same and the preceding issue of the Journal, a paper, by the late Dr. J. A. Jeffries, upon the ways in which tuberculosis is acquired, was published.

While indirect infection is probably the
chief mode of infection, there is doubtless enough direct infection to make State inspection of meat and dairy products, and a system of adequate compensation desirable. It is easier, however, to affirm this general proposition than to define the conditions and limitations under which it should be exercised, or to find expert agents for the judicious and satisfactory execution of such provisions. — Boston Medical and Surgical Journal.

Notes on the Employment of Exalgine. When I first began the use of this drug, misled by reports of its insolubility in water, I was accustomed to add to it a small quantity of tincture or other liquid containing alcohol. Since then I have learned that exalgine dissolves readily in hot water, and sufficient of the drug is retained in solution when the water is cold for all practical purposes.

A very convenient solution is that of eight grains of the crystals to the ounce. If made with hot water this solution is almost instantly effected and the drug is maintained in solution permanently. One tablespoonful of this represents four grains, which is the maximum amount of the drug that should be administered at one time. Half this amount, or two teaspoonfuls, will frequently give great relief, even when very severe pain is present.

I have never given exalgine hypodermically, but Dr. Roberts Bartholow, in the last (fifth) edition of his "Manual of Hypodermatic Medication," mentions its employment in this manner in doses of from one to four grains a day. He says, page 399: "When given for the hypnotic action, somnolence begins in fifteen to thirty minutes, and sound sleep soon follows very like the quiet, tranquil breathing of an adult in good health."

In regard to the disagreeable results alleged to have been produced by exalgine in some cases, they appear on examination to have amounted to very little. Dr. Désiré, who employed the drug in hundreds of cases of pain and dysphagia in tuberculous patients, reports but two cases in which the drug produced any unpleasant results, and these were not at all serious. Löwenthal, who used exalgine for months in thirty-five cases of chorea in children, with success, reports but a few cases in which the drug was not perfectly tolerated, and in these the medicament was resumed after a temporary withdrawal only. No further unpleasant effects were noted when the medicine was given a second time.

A patient of our own, who was very weak, complained of "stars before the eyes," she attributed this to the general condition. It was not necessary to withdraw the drug.

Dr. Moncorvo treated very young children (18 months to 12 years) for various painful maladies and chorea; the drug was well tolerated in every case.

From our own experience, and from what we have read on the subject, we should recommend the initial dose of exalgine in the adult not to exceed two grains, which may be gradually increased to not over four grains in one dose, given three or four times a day. For children one half or one third of this amount may be given. If any unpleasant effect is complained of the temporary withdrawal of the medicament is all that is necessary.

DR. R. K. UPTON.

The Tobacco Habit.—The amazingly rapid increase of insanity of late years can not have failed to arrest the attention of those who read the newspapers. While this increase is not confined to the ranks of the smokers, it will be found, we think, to be mainly among them, their children, grandchildren, and the immediate members of their families who are by association with them subjected to inhaling the smoke-laden atmosphere of their homes or offices, writes Dr. Henry S. Nash in the Golden News.

There are, of course, excesses other than this which are strongly conducive to insanity. Brain lesions are caused by traumatism, abscesses and other acute causes, but the postulate seems to us clearly and plainly established as wholly capable of substantiation, that the great, main cause of the present alarming increase of this affliction, as well as of by far the greatest proportion of all other neuroses, is the absorption into our systems of nicotine, aided by the effects of alcohol, coffee, tea, opium, cocaine, etc.

A combination of these and some others like chlortal, chloroform, etc., with nicotine, is vastly
more powerful for evil than many times the same quantity of any one of the agents mentioned in the last paragraph alone, except cocaine. The system will quite commonly fortify itself against any one of the whole list, retaining great quantities of those which are cumulative, like nicotine, and the user may live to a very advanced age under these circumstances. That is, if he uses only one with only an infrequent indulgence in some of the others.

The children of parents who use or are subject to constant breathing of the smoke of tobacco are quite generally of a strongly marked neurasthenic diathesis. The following facts will doubtless have been not infrequently noticed by those who feel any interest in such matters, or can be observed at any time by almost any one. Two people marry. The bride's father has either never used tobacco at all or has chewed it or sniffed it only, never having subjected his family to breathing atmosphere in closed rooms which was thick with its smoke. The groom, on the contrary, smokes freely in his rooms at home, and his wife for the first time in her life is compelled to live in an air charged with nicotine. In many instances, if the use of the weed is exceedingly free, no children at all are born, or only one.

But, suppose children appear; the eldest, born while the mother has been but a comparatively short time under the influence mentioned, will be a healthy child very nearly. It will be somewhat neurasthenic, but not very markedly so. The second child will be a very decidedly nervous one. The next almost an invalid, and here the number will be likely to stop. If, however, more children are born in this family, look out for neuroses or very early deaths. It is in such families that the children are so commonly lost from zymotic diseases.—Louisville Evening Post.

Hence, its usefulness in the simpler forms of dyspepsia would be regarded almost as a matter of course. This seems to have been the view taken by the eminent French observers who have lately experimented with it, for they proceeded at once to test the medicament upon the worst forms of dyspepsia—upon that class of cases which are alike the despair of the physician and the patient, and which so often lead to such final ruptures in their relations as the practitioner rarely regrets.

We here refer to those gastric phenomena which are manifested by sour and bitter regurgitations and obstinate pyrosis in all its forms; to the large class of flatulent and gastralgic dyspepsias; and those distressing distensions of the abdomen which no form of medical treatment had thus far relieved, and for which the rectal tube, electricity and massage have been able to accomplish very little. The clinical testimony of the Paris Hospital demonstrates that bromide of strontium (Paraf-Javal) acts like a charm in these cases, and this quality alone would give it a high position in modern therapeutics.

But not only is the bromide of strontium indicated in functional but in organic disturbances of the stomach, while in that formidable condition described as dilatation it has even effected cures.

DR. SHIBASABURO KITASATO—Dr. Kitasato, who for six years has been doing bacteriological work in Berlin, largely in Koch's laboratory, and whose name has become widely known in connection with his work on immunity, has been recalled by the Japanese Government to take the direction of an Institute for Infectious Diseases in connection with the University of Tokio.

GELSEMIUM FOR Colds.—Dr. Aulde in an article on "A Bad Cold" recommends gelsemium. Ten drops of a reliable fluid extract (assayed) are dissolved in three ounces of water, and of this mixture the patient takes a teaspoonful every ten or fifteen minutes for an hour, then at less frequent intervals according to the effects produced. The plan is simple, the medicine harmless in the dosage recommended, and not at all unpalatable.
Original Articles.

ANTISEPSIS IN OPHTHALMOLOGY.*

BY S. G. DABNEY, M. D.
Clinical Lecturer on Diseases of the Eye, Ear, and Throat in Hospital Medical College, Consulting Surgeon to Eye and Ear Department of Louisville City Hospital.

We are told by Dr. Knapp that in 1871 he made a visit to Edinburgh with the special purpose of acquainting himself with Lister's method, and that when he asked Lister whether this method would be productive of much benefit in ophthalmic practice, he replied in the negative. The small field of operation, the protection afforded by the lids, the antiseptic lachrymal secretion, and the usually simple instruments employed, all combined to render the danger of infection less in operations upon the eye than in most other parts of the body. Nevertheless, almost every ophthalmic surgeon would now feel that he was subjecting his patient to an additional element of danger by neglecting antiseptics, or at least careful asepsis, in every surgical procedure; moreover, the successful treatment of many diseases of the eye rests on a knowledge of their infectious character and the proper application of antiseptic agents. I wish, therefore, to briefly call attention to antisepsis in ophthalmology, first, in its application to operations on the eye and its appendages, and secondly, in the treatment of ocular disease.

Strictly speaking, we aim rather at asepsis than at antisepsis in ophthalmic surgery. Be-
pressure, milking out with an instrument applied to the lower part of the cornea. Knapp warns against using the edge of the upper lid to make counter-pressure on the wound, as he considers this a dangerous source of infection. After operating for stricture of the lachrymal duct it is well to inject through it a solution of bichloride of the strength above indicated.

As regards the dressing after an operation, it may be very simple. A little lint smeared with vaseline is laid over the closed lids, and upon this a layer of absorbent cotton soaked in a solution of the bichloride, and finally a little dry absorbent cotton to fill out the orbit, the whole held in place either by strips of adhesive plaster or a roller bandage. For my own part, after using the adhesive plaster dressings for several years, I have returned to the roller bandage, as I find this more comfortable to the patient and to more thoroughly steady the eye.

It is not wise to put the bichloride dressing immediately next the skin, as a very disagreeable erythema is often so produced. The presence of diabetes mellitus probably increases the dangers of suppuration after an operation in the eye as elsewhere, and yet the statistics of removal of diabetic cataract do not show any greatly excessive number of suppurative cases. Of course the diabetes should be reduced as much as possible before the operation. Careful examination of the tear-sac should be made before any operation on the eye-ball. A chronic dacrocystitis is a most dangerous source of infection in such cases.

It is a remarkable fact that the apparently simple operation of needling for capsular cataract, even when performed with every antiseptic precaution, is sometimes followed by suppuration. Knapp accounts for this on the theory of latent pyogenic germs in the eye being excited to activity by this second operation. I have seen no cases in my own practice as yet.

The prophylactic treatment of sympathetic ophthalmia by injection of a solution of bichloride of mercury into the eye, as suggested by Abadie, has not, so far as I know, found any advocates in this country.

It is, however, in the treatment of corneal and conjunctival disease that antiseptic remedies are of the greatest value in ophthalmology. First in importance here, because in my experience first in its efficacy, I would place the actual cautery in the treatment of suppurating ulcers of the cornea, especially that form known as ulcer serpens. I have found this treatment infinitely superior to any other in this disease. At my clinic at the Hospital College I have on several occasions simply cauterized the ulcer once with the red-hot probe, prescribed the instillation of eserine sulphate and the application of a hot solution of the bichloride at home, and been rewarded a few days later by seeing the eye far on the road to recovery. The application of a four-per-cent solution of cocaine renders the burning painless.

Next in its value and of wider application is nitrate of silver, a remedy long used with great success in diseases of the eye, and also, like every other powerful agent, liable to most dangerous and disastrous misapplication. According to the bacteriological experiments of Weeks, one-per-cent solution of nitrate of silver is a most speedy and certain destroyer of the staphylococcus pyogenes aureus, and presumably of the gonococcus of Neisser also; hence arises the great value of this drug in suppurative conjunctivitis.

The bichloride of mercury solution, from 1-5,000 to 1-10,000, is also of frequent advantage in suppurative ophthalmias and in ulcers of the cornea. I prefer it in cases of inflammation of the tear-sac. The solution should be passed into and, if possible, through the sac into the nose with the lachrymal syringe after slitting the canaliculus. It is in disease of the tear-sac, and scarcely anywhere else, that pyoktanin still finds some use in ophthalmology. A solution of 1-1,000 is a safe antiseptic, but after a trial of it in several cases I do not believe it to be at all superior to the bichloride. This aniline dye, for which such extravagant claims were advanced a few years ago by Still- ing, of Strassburg, and which for a time found a wide application both in solution and in solid stick, and even as intra-ocular injection, has almost lost its place in ophthalmology, and except in tear-sac disease, and by some in ulcers of the cornea, is rarely used.

The peroxide of hydrogen, too, has but a limited field of usefulness in ocular disease.
It may be used to advantage in purulent dacrocystitis, but, if strong enough to be efficient, it will be painful and irritating to the eye, and hence should be preceded by an application of cocaine. Where there is an ulcer of the cornea with purulent base and edges, the bubbling peroxide beautifully outlines the ulceration; but in my experience it is not nearly so valuable an application here as the actual cauterity.

In certain forms of phlyctenular ophthalmia the dusting of calomel on the phlyctenulae is a most valuable local treatment. Since Weeks has shown that calomel has a high rank as an antiseptic, we may probably account for its action in such cases on this ground. The yellow oxide of mercury salve is valuable in the same way. The oil of cade is a useful application in many cases of marginal blepharitis, and it too is an antiseptic of decided strength.

Laryngology: A Report.*

By Thomas Hunt Stucky, M. D.
Professor of Materia Medica and Therapeutics, Hospital Medical College, Louisville.

While gathering the material from which to make the report on laryngology, nothing has so impressed me as the increasing aversion for tracheotomy and the substitution for it of the much safer operation of intubation. It may be interesting here to review a letter read at a recent meeting of the Missouri Valley Medical Society, at Omaha, by Dr. Inches, of Scribner, from his former class-mate, Dr. O'Dwyer, regarding the operation of intubation. In this letter Dr. O'Dwyer gives the views he at present entertains regarding the operation of which he is the father. He states that intubation, like every new thing, has been much abused, and that it is a difficult operation to perform because of the celerity with which it must be done. The necessary skill can only be acquired by a great amount of practice on the cadaver. Unless this be done much suffering will be caused and many lives sacrificed. For these reasons the doctor is of the opinion that the operation should not be attempted by those inexperienced in its technique, and believes that one intubationist in a city of fifty thousand is sufficient. Regarding the indication for the operation Dr. O'Dwyer says that, should death be impending from obstruction in the larynx, and should one competent to perform intubation be at hand, it should be done, otherwise tracheotomy is to be preferred as the safer of the two.

He further states that intubation will accomplish all that tracheotomy will and a great deal more, but that tracheotomy may be called for after intubation has failed, should loose membrane exist in the lower part of the trachea. As a primary operation in croup, when an intubationist is at hand, Dr. O'Dwyer regards tracheotomy as absolutely unjustifiable.

Ranke (Chirbl. Chir., March 7, 1891) reports 364 cases of intubation in diphtheritic croup. Of these 132, or 36 per cent, ended in recovery. Among 849 cases of tracheotomy, 39 per cent ended in recovery.

It is found that in very young subjects, in whom tracheotomy is very fatal, intubation is more successful. Pneumonia is less common after intubation than after tracheotomy.

Jacques (Rev. med. dis. mal. de l'enfance, January, 1891) approves of intubation, and quotes from Waxam and Northrup the following advantages:

1. It is as efficient as tracheotomy in relieving the dyspnea.
2. There are no objections on the part of parents and friends as in tracheotomy.
3. The operation is comparatively easy and simple, and presents neither danger nor shock.
4. Anesthetics are not necessary, neither are skilled assistants.
5. No wound is added to the patient's suffering, to become a source of new infection.
6. Less irritation results from the tube than from the cannula, because the tube is smaller than the trachea, and is so shaped that it presses only upon the glottis.
7. Expectoration is easier with the tube than with the cannula.
8. In the case of the tube the air reaches the lungs moist and warm, thus lessening the danger of pneumonia.
9. The operation is not bloody, a decided advantage in the case of a weakened child.
10. It is more rapid and presents fewer dangers than tracheotomy.

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*Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Association.
11. Convalescence is more rapid, for there is no wound to heal.

12. The patient does not require the assiduous and continuous care of the physician, as in tracheotomy.

13. It does not prevent tracheotomy and, if that operation is required, the tube will furnish a useful guide.


15. In mild cases, in which treatment is required for but a short time, it is of special value.

Pauli (Therap. Monatsch., January, 1891) is one of the few who prefer tracheotomy to intubation. He acknowledges the advantages of intubation, but thinks the after-treatment presents difficulties that more than counterbalance them. In his experience the tube has sometimes been blocked up and has even slipped into the trachea and has frequently been coughed up. Ulcerations have formed about the tube also, and feeding has been a matter of much difficulty. Pneumonia has occurred more often than after tracheotomy. He performs intubation only when tracheotomy is refused by the parents.

Dr. J. Mount Bleyer, of New York City, gives, in the Archives of Pediatrics, an analysis of 512 cases of intubation with the following results: Out of 251 cases of children, under three years of age, there were 73 recoveries, and in 260 cases, three years of age and over, there were 115 recoveries; total, 189 cases of 512 operated upon. The causes of death are given throughout. The greatest number died from diphtheritic bronchitis, 67; bronchitis, 43; pneumonia, 41; broncho-pneumonia, 40; sepsis, 39; heart-failure, 21; exhaustion, 20; double pneumonia, 16, and membranous group, 12.

Dr. Walter B. Johnson, of Patterson, reports eighteen cases of intubation of the larynx. The cases in which he performed the operation occurred during the seven months, commencing with July, 1890, the severer part of the epidemic at Patterson. This accounts for the fact that only three of the eighteen recovered. Although in all there was very gratifying relief from dyspnea.

Dr. Ranke, writing in Munchener Medizinische Wochenschrift, says that intubation is to be preferred during the first year of life, but that tracheotomy gives better results in older children. He considers the risk of intubation less than that of tracheotomy, if proper tubes are carefully used. The number of cases upon which he bases his comparison is rather small, and the difference in favor of tracheotomy is slight.

If, in a case of intubation, it is impossible to remove the tube in eight or ten days, he advises that the operation of tracheotomy be performed.

Waxham, of Chicago (Archives of Pediatrics, July, 1891), reports some statistics of intubation. He has collected 343 cases operated on, ranging from under one year to sixty years of age, with 123 recoveries, showing 35.85 per cent recoveries.

In reply to an inquiry of the local profession as to the number of intubations performed, I have received the following: Pusey has performed 55 intubations with 23 recoveries; Cheatham, 54 intubations with 22 recoveries; Ray reports 21 cases with 8 recoveries; Evans and Taylor have each operated 11 times and each report 5 recoveries.

Counting all the cases reported in this report, we have 1589 with 510 recoveries, giving 35.92 per cent of recoveries. We have not a similar number of tracheotomies in this report to compare, but the number of cases collected show a better percentage of recoveries. Not in all cases where tracheotomy is called for is intubation applicable; nor is it justifiable to perform tracheotomy in those cases where intubation suffices. Then can we select either operation with disregard for the other? If so, which of the operations is to be preferred? These are the questions we wish to discuss.

Richard B. Faulkner, of Alleghany, Pa., has made inquiry of the profession at large concerning intubation, and presents a startling array of opinion against the operation. In reply to his question, Do you think intubation will be able to hold its own as a resort in diphtheria? D. Hays Agnew answered tersely, "I do not;" Thomas G. Morton, "No;" H. Tuholske, "I do not think so;" Louis Starr, "Not in severe cases;" John Ashhurst, jr., "It will never sup-
plant tracheotomy, and I am disposed to think that it will be less often resorted to in the future than it is at present;” A. C. Bernays, “I do not think that intubation will prove successful in diphtheria;” R. W. Lovett, “I do not believe that intubation will hold its own when contrasted with tracheotomy in severe cases of laryngeal diphtheria;” C. H. Mastin, “It has not stood the test, and I am certain it will fall into disuse. It has always appeared to me as a most unsurgical procedure, and one that I have always opposed.”

This is certainly a collection of opinions of brilliant thinkers, and such disregard shown an operation that has yielded such encouraging results, some operators reporting over forty-one per cent of recoveries, is surprising, to say the least. In striking contrast to this war of operations stands the eminent authority, Jacobi, who has discarded both intubation and tracheotomy and relies solely upon mercurials.

**New Instruments and Therapeutics.** The past year and the present one have both brought to notice many new instruments and improvements upon old ones. Much ground has been gained also in therapeutics. Many drugs and therapeutical procedures have been dropped for newer implements with which to wage the warfare against disease. Some old procedures have been revived for fresh trial by the search of advancing science that digs in the past as well as dips into the future. Jarvis has modified his nasal ecraceur, making it much more convenient to handle. Edigi has given us a hollow obturator for the solid one of O'Dwyer. Gottstein, Delavan, Holden, and Hinkle have each added new instruments to the many now in use for the removal of adenoid vegetations from the vault of the pharynx. Roe and Chappell have presented us with new devices for removing hypertrophied tissue from the base of the tongue, and Seibert has given us another agent, and an instrument with which to use it, in the treatment of diphtheria. His chlorine water, introduced under the mucous membrane by the many-needled syringe, is receiving a trial by the thirsty profession. Strouse offers a new spray-tube, Mulhall a modification of Mackenzie's laryngeal forceps; Asch presents us with a new snare; White a double nasal spray and vaporizer, and Myles a nasal clipper. Lactic acid, used a few years ago as a local application in tubercular laryngitis, has been revived by some members of the profession, among them C. R. Weed, who reports, in the New York Medical Journal of January 9, 1892, three cases in which he claims very favorable results.

To enable a vocalist to sing when affected with subacute laryngitis is at times an important matter, says Faulkner, and he, while admitting the prudence of rest, appreciates the importance of treatment under pressing engagements. In these cases he is in the habit of first giving a laxative; then using a one-per cent spray of cocaine accompanied by aconite and aromatic spirits of ammonia internally, and a lozenge several times daily containing bimeconate of morphia, hydrochlorate of cocaine, tr. aconite, and allthe root. In the morning of the day on which the patient is to sing, the sixtieth of a grain of strychnine is administered after breakfast, the same after the noon-day meal, and in the evening after luncheon and before departing for the concert the twentieth to the thirtieth of a grain.

A method worth mentioning, as there may be some physicians to whom the idea has not occurred, is proposed by F. A. Burrall, of New York City, for the more thorough spraying of the posterior and anterior nasal cavities: Direct the patient to inhale deeply, and place the tip of the atomizer behind the uvula without touching the posterior pharyngeal wall. Then the patient is to close his lips upon the tube and exhale through the nose. This carries the spray well forward upon the walls of the nasal cavities.

**Louisville.**

**The American Medical Association.**—Any member of a State Medical Society can at once become a member of the American Medical Association, without attendance on an annual meeting of that body, and receive the weekly Journal of the Association, by forwarding to Richard J. Dunglison, M. D., Treasurer, Lock Box 1274, Philadelphia, Pa., a blank, properly filled and signed by the president and secretary of your State Society, with five dollars for annual dues.
OTOLGY: A REPORT.*

BY W. B. M'CLURE, M. D.

Herodotus says there were specialists in Egypt, a certain doctor for a certain kind of disease, but no mention is made of an aurist. In fact so obscure was a knowledge of the ear in the early history of medicine, that not until the middle of eighteenth century was its anatomy and physiology known; and not until many years later was the treatment of its many ailments reduced to any thing like an exact science. To Valsalva are we indebted for resurrecting from obscurity the most important branch of general medicine; and though his ideas and knowledge of the ear were crude, and in many instances false, yet he it was who gave to its study an impetus which continued growing and gropingly struggling till a hundred years later, when Sir William Wilde brought otology or aural surgery, as he termed this department, down from the terra incognita of the ancients to a point where it could be taken up and grappled with by the general practitioner.

From these wonderful researches of Wilde began an enthusiastic investigation of this hitherto benighted subject, which has extended and widened till this department of medicine is fully abreast with all of the other branches of medical science.

It is not my purpose in this report to speak specially of all the diseases of which this Pandora's box, the ear, is subject, but to confine my remarks to the more frequent and therefore more important diseases affecting the organs of hearing.

Within the last few years a new cause has been added to the already numerous list of causes affecting the middle ear. It is now an established fact that a very large per cent of the cases of influenza, or la grippe, result in otitis media.

One author reports seventy-five cases of middle ear disease following la grippe, and of this number fifteen were catarrhal and thirty-eight purulent in character. The same author reports having seen a number of cases of mastoiditis from the same source. In my own limited experience I have never before been called upon to treat half so many ear cases as during the past twelve months.

It will thus be seen that we are just entering upon a new and important era in the field of otology. How to meet these rapidly increasing cases, and to discover, if not a prophylactic, at least a safe and successful plan of treatment, will constitute a very important part of the researches and labor of the aurist henceforth.

From what I have seen of the intensity of the inflammation of the middle ear accompanying la grippe, the object of our treatment should be, not only an effort to prevent the hearing of our patient becoming impaired, but a determined fight to save our patient from the fearful consequences of a violent inflammation in the tympanum, with its well-known tendency to extend either to the mastoid cells or to the brain itself. In my own experience the treatment pursued in this form of otitis media has not differed greatly from that of the same conditions from other causes. It has also been my experience that the results have not been so satisfactory as that obtained from the same line of treatment when the condition was due to other causes; this, however, has probably been due to the existence of extreme nervous and physical exhaustion which always follows influenza.

Of the numerous diseases of the ear which the physician is called upon to treat, the one demanding the most active and energetic work is known as acute otitis media. This disease, as is well known and as its name implies, is an acute inflammation of the middle ear. There is no one exempt from this very painful malady, though it is most frequently seen in early childhood. Its earliest symptoms are pain, impairment of hearing, and bulging of the membra tympani.

This stage, if not controlled or aborted, rapidly passes on into the stage of suppuration. The rapidity with which the inflammatory passes into the suppurrative stages is sometimes wonderful. it having been known to occur within six hours of the first symptoms. It will thus be seen, that if we hope to avert the sup-

* Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Society.
purative stage with its attendant evils prompt action is an absolute necessity. But unfortunately the patient is seldom seen until several hours, or in some instances days, after the onset of the disease, and to this neglect, we believe, is largely due the unfavorable results so often obtained in the treatment of suppurative otitis. The cause at first may be trivial, but its early discovery and removal is of the utmost importance.

The oft-repeated fallacy, that it is dangerous to check a discharge from the ear, or that a slight deafness will get well of itself, is often heard from the laity. It is the business of the physician, not only to discourage, but to refute such false reasoning.

The danger from neglecting an acute catarrh of the middle ear is not, as is commonly believed, a rupture of the membrana tympani, but it is that the inflammation, if allowed to continue for any great length of time, will not only cause chronic thickening of the tympanic mucous membrane, but may extend to the surrounding parts, involving the mastoid cells, or even the brain itself. As before stated, the preservation of the integrity of the membrana tympani is not of prime importance, for in the first place, if it is ruptured, the probabilities are that it will unite again; and in the second place, if it does not unite, hearing is not necessarily seriously impaired. For it is a well-known fact that the membrana tympani is not so important an organ as was formerly believed, and that a destruction of any or all of this membrane does not necessarily mean a serious loss of hearing power. Argument is still being waged as to whether or not there exists a normal opening in the membrana tympani.

Some of our very best authors assert with warmth and positiveness that Rivinne, that distinguished aural pioneer, was correct when, more than a hundred years ago, he declared that he discovered an opening, normal in appearance, in the membrana flaccida, near the handle of the malleus.

Hyril and others deny the existence of the Rivinian foramen. However this may be, its physiological function, if it does exist, can not be of great importance, since those who claim its existence assert that they only found it after hours of search with a powerful magnifying glass. It is extremely doubtful if we ever see a case of primary myringitis, that is, a disease arising primarily from the drum membrane, but the numerous inflammations of the drum membrane are usually the result of an extension of inflammation from the surrounding parts to the membrana tympani, and rarely or never have their beginning in the membrana tympani except, perhaps, from traumatic causes.

As before indicated, I shall not in this report attempt a discussion of all the diseases met with in aural practice, but will confine myself to a discussion of a few of the most important ailments met with in every-day practice. Of these, the one of most prominent importance, not only to the general practitioner but to the specialist as well, is chronic non-suppurative inflammation of the middle ear. There is probably no disease met with in the whole category of ills affecting the human family that promises so little from treatment as does this one ailment, which involves a space no larger, perhaps, than the surface of a copper cent. In fact until very recent years no one has been bold enough to claim to be able to give any relief to this obstinate and unyielding disease. However, it has been discovered that one lack of success has been largely due to a lack of early diagnosis. This disease is so insidious, and the inflammation comes on so slowly, that the patient himself is not aware of its presence till the functions of the tympanum become so involved that an impairment of hearing warns him that something is wrong. Here I am speaking of progressive inflammation, and not one following an attack of acute inflammation, the latter of which is comparatively easily relieved. In chronic non-suppurative inflammation of the middle ear our means of diagnosis are almost wholly subjective, to the truth of which every one will testify who has looked through the otoscope in vain for some manifest cause to account for the symptoms of which our patient complains. Thus it is that the disease may have progressed for months, or even years, before the physician is consulted for a recently discovered impairment of hearing, or a slight
ringing in the ears. It is probably true that if we could now be permitted to look into the tympanic cavity or the eustachian tube, we would find in one or both fibrous bands, constrictions, or possibly plastic thickening. But, unlike the general surgeon, we are denied this boon.

If in his work he suspects a chronic inflammation in the abdominal cavity, he makes his exploration incision, goes down into that cavity and searches for an obscure cause to account for certain symptoms, and the same may be true of the thoracic cavity, and even of the cranium itself. But the aurist must depend almost wholly upon the meager information drawn from a sometimes ignorant patient for a knowledge of the symptoms of one of the gravest diseases in the whole category of ailments.

This much in explanation of the difficulties under which the aurist labors.

As to treatment I have nothing new to offer, other than what I laid down and followed by most aurists, viz., inflation once or twice a week, followed by medicated vapors, the best of which I believe to be iodine and camphor. We do not advise the inflation for the purpose of getting air into the tympanum only, but it should be prolonged and rather powerful, that is, of sufficient force to break up any adhesions that may be formed within the tympanum, or to forcibly dilate constricted parts, for it is in this way alone that we may hope for benefit by inflating the middle ear.

Of course we must bear in mind the sometimes weak condition of the membrana tympani resulting from disease, and not use the inflation with sufficient force to cause a rupture of that membrane. If the eustachian tube be constricted, occluded from any cause, and can not be opened by means of the air-bag, catheterization should be resorted to.

A recent plan of treatment for the relief of deafness, the result of progressive inflammation, especially when ankylosis of the chain of bones is suspected, is by means of massage. For this purpose a number of ingenious instruments have been devised, none of which are probably better than a simple rubber tube with a common tin funnel at the distal extremity. If tinnitus is, as is frequently the case, a distressing symptom, tenotomy of the tensor tympani sometimes gives wonderful relief.

Of course, if there is naso-pharyngeal catarrh, or nasal obstruction, these must be corrected. The operations of Prout, Hinton, and others, upon the membrana tympani for the relief of tinnitus and other chronic affections of the ear have had their day, and are now seldom practiced.

An exception in favor of opening the membrana tympani should be made, however, when we are satisfied that there is retained mucus within the tympanum. The membrane may be punctured and the mucus washed out with decided benefit to the patient.

In addition to the sometimes fatal tendency of chronic inflammation of the middle ear, there exists a condition, or rather a symptom, that does not kill, but is capable of rendering our patient’s life miserable and makes him sometimes prefer death to its continuance. I refer to tinnitus aurium.

This continuous roaring has been variously described, some liking it to the ringing of bells, others to the murmuring of trees or to the hum of a tea-kettle. However, this apparent discrepancy is, I think, satisfactorily explained by Wilde, who says that the description which patients give of the noise is due to their fancy, dependent upon their walk in life, they likening it to the sounds with which they are most familiar. Thus persons from the country or rural districts draw their similitude from the objects and noises by which they have been surrounded, as the falling or rushing of water, the singing of birds, the waving of trees, or the humming of bees, while those from the city liken it to the rolling of carriages, the hammering of machinery, etc. So disagreeable does this constant ringing, roaring, buzzing sound finally become that insanity not infrequently follows. Many cases of suicide have been reported caused by this harassing, intolerable, never-ending ringing in the ears. Dr. Roosa reports the case of an eminent college professor who consulted him on account of a distressing tinnitus aurium, and when told by Dr. Roosa that there was no relief for him, remarked that if “he felt sure that the doctor was correct in his prognosis, he
would put an end to his existence," which he did a few months after, by blowing out his brains. Many similar cases have been reported. Dr. Pomeroy, of New York, examined sixty lunatics at Blackwell's Island Lunatic Asylum, and found disease of the middle ear in a number of those who suffered from aural hallucinations.

We not infrequently find in persons suffering from tinnitus aurium a confusion of intellect, or an inability to keep up a connected line of thought. Only recently a young lady patient who is serving as a private secretary, informed me that unless she could very soon get rid of a very disagreeable ringing in her ears, she would be compelled by reason of inefficiency to give up her position.

Let us inquire into the nature of this phenomenon. Ordinary tinnitus should be distinguished from a venous murmur, transmitted from the jugular vein which runs just beneath the floor of the cavity of the tympanum, and also from the pulsating sound of the internal carotid as it winds through the apex of the petrous bone. This variety of tinnitus is not necessarily connected with impairment of hearing, but is usually due to anemia or aneurism.

The cause of the subjective form of tinnitus aurium has been much discussed, but as yet we are in ignorance of its exact nature. We do know, however, that it is most always an accompanying symptom of chronic non-suppurative disease of the middle ear. It also occurs in inspissated cerumen. Reasoning from the nature of the disease of which it is an accompanying symptom, it is fair to conclude that it is most probably due to pressure exerted upon the vessels of the tympanum and labyrinth, or it may in a measure be due to a lack of pressure equilibrium. Of course this chronic catarrh of the middle ear usually has its origin in a pre-existing chronic inflammation in the throat.

As I have already indicated, the results gained by treatment of these cases are far from satisfactory, yet many of them are much benefited, and not a few of them cured. Many remedies have been suggested and advocated by different authors, but, the condition we are discussing is merely a symptom, and of course the rational indication is, first, if possible, to remove the cause of the condition. If it be due, as it frequently is, to post-nasal catarrh, that condition should be looked after and relieved. If to proliferous inflammation of the middle ear, direct the treatment accordingly. If the eustachian tube be occluded, open it up with the catheter or Pollitzer's air-bag. If the external auditory canal contains hardened cerumen, remove it. If the patient be anemic, give tonics.

Of the numerous remedies suggested for internal medication, only one in my hands has given any degree of satisfaction, and that one is nitro-glycerine. It is not easy to explain how it sometimes gives relief in the very worst cases of roaring, but that it does, is a well-known fact, and only recently I have seen one case entirely relieved by its use alone. It is most probably in those cases of relaxed condition of not only the mucous membrane of the tympanum but of the arterioles; and the effect of the nitro-glycerine on the muscular coating of the arteries gives better blood pressure, and lessens any friction that may exist in the flow of blood through the middle ear.

In conclusion, when we contrast our present advanced knowledge of aural work with that before the days of Wilde, we may conclude that a new era in this department is beginning to dawn upon us, and we believe that ere long this field of work will be fully abreast with those in other departments of medicine.

LEXINGTON, KY.

A COMPOUND COMMINUTED FRACTURE OF THE FRONTAL BONE.

BY W. H. PITTMAN, M. D.

On March 29th I was called to see a robust boy, six years old, who had on the evening of the 26th been kicked by a mule. I found him perfectly rational, pupils slightly contracted, temperature 100°, and respiration good, with a deep depression in the frontal bone above the suprachiliary ridges. Over this depression a large contused flap had been neatly stitched down, and bloody water oozed out freely. I consulted the physician who had dressed it shortly after
the accident, and he informed me that he calculated to let it remain as it was, unless serious brain symptoms should set in. The boy's parents insisted that I should take charge of the case, and took the evening train for this place.

The trip did not appear to weary him very much, and after taking some food he rested well during the night under the influence of bromides. On the morning of the 30th his temperature had gone up to 101.5°, and bloody pus was freely oozing from the wound. I then called A. A. Bondurant, M. D., in consultation, and after considering the deep depression, character of the wound, etc., we concluded to raise the flap and ascertain the extent of the injury. By the assistance of Dr. Henry McElmurry, who kindly helped us, he was put under the influence of ether and the fracture exposed, which was full of pus, and measured externally two inches in a transverse and seven eighths of an inch in a vertical direction. Both plates of the bone were broken in, with the lower margin of the fractured bone resting on the brain at an angle of eighty degrees and forming an obtuse angle with the upper portion of the bone from which it had been broken.

Several small pieces of bone were taken away with the forceps from the lower margin of the fracture on the right side, which afforded ample room for the elevator. After having introduced the elevator, we tried to raise the main piece of the fractured bone, but failed. The elevator was then moved to the upper margin on the right hand side, and by slight traction the piece of bone easily came away. I might say here that it measured one and three fourths of an inch in length by seven eighths of an inch in width externally; on the internal aspect one and three fourths of an inch in length by one in width. After removing this large piece of bone we observed a large black clot and several smaller pieces of bone, ranging from half the size of the one mentioned to that of a pin's head.

After having removed the clot and bones, some of which had been forced by the violence of the blow between the brain and cranium (eleven in all), we washed out the wound, closed the flap with silk sutures, leaving room for free drainage, and dressed it antiseptically. In due time the boy came nicely from under the ether narcosis, partook of some light diet, and by evening his temperature had gone down to 100°. During the night he rested well, bowels and kidneys acted, and on the morning of the 31st was resting nicely with a temperature of only 100°. During the day he drank some soup and milk, but by evening had a temperature of 102°. During the night he rested fairly well, took some nourishment, bowels and kidneys acted; but in spite of all the antipyretics he could bear, on the morning of April 1st his temperature had gone up to 103°. By 10 A. M. it went to 104°, at which time he became delirious and remained so the remainder of the day, taking nothing, only what was administered hypodermically. By evening his temperature had raised to 105.4, and he was still delirious, in which condition he remained until 11 A. M. the morning of the 2d, when he died, seven days and eighteen hours after the accident, and four days after the operation. Five hours after death we opened the wound, found the membranes highly inflamed, and upon opening the cortical portion of the brain in the median line a vast amount of pus gushed out from the cavity where the brain tissues had broken down. While we are not justifiable in interfering where only slight depressions exist in the skulls of children without brain symptoms, I do believe that an early operation in such cases as the above is not only justifiable but imperative.

CHARLESTON, Mo.

Societies.

KENTUCKY STATE MEDICAL SOCIETY.

Stated Meeting, Louisville, May 4, 5, and 6, 1892. Dr. H. Brown, of Hustonville, Ky., President, in the chair.

Dr. S. G. Dabney read a paper on Antisepsis in Ophthalmology. (See page 353.)

DISCUSSION.

Dr. John A. Larrabee: I rise to ask one question. The doctor, in his paper, in discussing the application of nitrate of silver, gave great credit to the old-time remedy, and wound up with the statement that it might become
highly dangerous. I think if there is any thing in the profession in which we, as medical men, are like a flock of sheep, it is in the matter of therapeutics. If one one makes a break over the wall, we all follow. Somebody has said that nitrate of silver was dangerous to the eye. Nobody knows why. This is the nucleus for his therapeutics. It leaves a sting there that might become highly dangerous. I rise to ask whether nitrate of silver put in the eye can become dangerous? I am aware the caustics will do it; but I am not aware that nitrate of silver in any solution, of from ten, twenty, or thirty grains, can become a caustic until it has had its effect upon the albuminous tissue or the chlorides that are present. In not going beneath the surface, but conglutinating upon it, it differs entirely from the copper and other preparations used. I can not see why this danger is spoken of with so great fear, while other agents that are truly caustic are used with impunity in diseases of the eye.

Dr. S. G. Dabney: Preliminary to the application of nitrate of silver, a careful examination of the cornea should be made to see that there are no ulcers there, and that there is no inflammation of the iris. Inflammations of the iris complicate the external inflammation of the eye, and in that class of cases the application of nitrate of silver would be most dangerous. It would certainly increase the iritis. In ulcers of the cornea a solution of nitrate of silver not only retards the effect of the ulcers of the eye, but the eyeball itself is likely to take on a deposit in the ulcer more or less difficult to reach. Before the application of nitrate of silver the cornea should be carefully examined; this is especially important in cases of ophthalmia neonatorum. Those cases in which it is hard to examine the cornea, it is difficult to separate the lids to get a view of the granular surface.

Dr. Larrabee: Are not those the cases in which nitrate of silver is beneficial?

Dr. Dabney: In ophthalmia neonatorum without corneal involvement I think it is the best agent we can use. I notice in the report of the Presbyterian Eye and Throat Hospital by Dr. Chisholm, that his treatment for ophthalmia neonatorum consists in dropping a solution of nitrate of silver into the eyes of children every day, and they are brought to the hospital for this purpose daily. At home the eye is cleansed with a solution of boric acid.

Dr. T. Hunt Stucky, of Louisville, read the Report on Laryngology. (See page 355.)

DISCUSSION.

Dr. J. H. Letcher, of Henderson: I regret to notice that the members are so dilatory in discussing the paper which has just been read by Dr. Stucky; in which he dwells upon the relative merits of intubation and tracheotomy, because it is an important subject and one that we will all have to deal with. The doctor quotes the statistics of Dr. Richard B. Faulkner, of Alleghany, Pennsylvania, who, I believe, is a general surgeon. It has been my experience that intubation has been done a great deal by laryngologists who devote their time exclusively to throat troubles, hence I do not believe that the testimony given by Dr. Faulkner should make a marked impression on us. The men he has quoted are largely general surgeons, and naturally we should not expect them to look kindly upon an operation that is done so much at the present time. The doctor has said it will be impossible for intubation to take the place of tracheotomy. It is an operation that has come to stay, but I doubt whether it will be used as much in the future as in the past, yet it has a place. While we can do intubation, it does not prevent tracheotomy with the knife. My experience in operating on three cases leads me to favor tracheotomy; but these cases have not been fair ones upon which to judge the relative merits of the two operations. The patients have been some distance from home, and all of them in a bad condition.

Dr. T. H. Stucky, in closing the discussion, said: My object in quoting the statements commented upon by Dr. Letcher was simply to show the apparent disfavor with which the average surgeon seems to hold the operation of intubation. That it has come to stay there is no question; that it will supplant tracheotomy, no one will say; but that there is a large class of cases in which intubation is indicated and tracheotomy not, no one will deny.
The question of when to do these operations and in exactly what class of cases seems to be the one to decide. Every general practitioner knows he will frequently come in contact with patients who will positively forbid the opening of the throat; that they see the extreme condition of the little patient, they recognize the nearness of death, and the very fact of an operation they abhor. But the introduction of a tube in skilful hands by one familiar with the operation, and with the great relief that seems to follow a fresh breath, makes it at least a great palliative measure, and if it were nothing more than this, its use would be a blessing. But in truth, in saving life it makes as good if not a better showing than tracheotomy.

Dr. W. B. McClure, of Lexington, read the Report on Otology. (See page 358.)

DISCUSSION.

Dr. M. F. Coomes, of Louisville: I heard only that portion of the paper, Mr. President, which the doctor has just read concerning tinnitus aurium producing insanity, derangement of the mental faculties, etc. In nearly twenty years' practice I have never found a patient so mentally disturbed from tinnitus aurium as to incapacitate him. I believe many of the complaints associated with defective memory, and so on, connected with tinnitus aurium, are due to hysteria and mental depression. These people are in a depraved condition physically; they suffer from dizziness.

Tinnitus plays an active part so far as it is connected with chronic inflammations of the middle ear. Tinnitus is incurable, unless you succeed in curing the chronically inflamed middle ear. It is an exceedingly annoying affection to treat. I think there is very little danger of loss of life or destruction of the mental faculties. I do not know that I am exactly right in criticising the gentleman's paper in this manner, but what I heard of it led me to infer that in some cases the individuals might lose their mental faculties and become deranged as a result of tinnitus aurium. If the gentleman made this statement I certainly think that if he will look up the statistics he will find that there are few cases, if any, that can be attributed to this cause.

Dr. S. G. Dabney: I have listened to the paper with a great deal of interest, and I regret that the doctor did not touch upon some points which are of interest to all of us. He says nothing in regard to excision of the membrana tympani and ossicles in excessive tinnitus and long-standing suppuration. The operation mentioned is one of the most radical and recent procedures in aural surgery, yet it has so far found few advocates, but those few claim marvelous results. I have not seen any of the cases, and shall be glad to hear what his experience has been.

With regard to the otitis that follows influenza, I differ a little with him in regard to treatment. He says he has not found that it required any modification of the usual line of treatment. In my observation some modification has been required, owing to the excessive depression that characterizes la grippe elsewhere. I have found such cases very intractable, but after a long course of treatment yielding to remedies. The most notable characteristics in otitis following influenza, in my experience, have been great depression and pain.

The essayist spoke of a normal opening in the membrana tympani. It is a matter of interest to know that one of the most distinguished aurists of America, Dr. Roosa, has a normal opening in his own membrana tympani. He is conscious of it. It is not the result of disease, nor has he ever suffered from any condition of the ear that has produced it.

As to injections in the middle ear, in my judgment that line of treatment is on the wane. The injection of iodoform or any other fluid in the middle ear is gradually losing ground.

The auriscope, the apparatus suggested by Dr. Lewis, is used; also massage, the artificial movement of the ossicles exhausting air in the auditory canal by suction with a little rubber tube, washing the contracted membrane; in the meanwhile there closes a covered disk. Catheterization is a point the doctor touched upon. My experience in cases in which the eustachian tube is absolutely impervious to air by the Politzer bag or catheter is rare. I find these cases exist only in the beginning of acute catarrhal troubles, when the swelling of the eustachian tube is such as to cause obstruction.
I find by waiting a few days the swelling subsides, the tube becomes pervious, and use of the eustachian bougie is not necessary.

Dr. W. B. McClure: I would say that I did not indorse the former method of injecting fluids into the middle ear. I do not use fluids, but sometimes use vapor of iodine or camphor.

As to the point raised by Dr. Coomes with reference to the results of tinnitus aurium, he questions the statement and says that it seems almost impossible that it could result in insanity. I simply have to report the case reported by Dr. Roosa, a professor who took his own life when he was informed that his case of tinnitus could not be relieved, that it was so distressing. The man could not have been in sound mind.

The report on Abdominal and Pelvic Surgery was read by Dr. W. H. Wathen, of Louisville.

The author is conservative and would not mutilate his patients by the removal of important organs if it be possible to avoid it. He said he believed that there is no department of surgery that has been carried to a greater extreme by enthusiasts and record-makers than laparotomy. This fact has become so flagrantly manifest that there is a general protest from the honest, learned, and conservative abdominal and pelvic surgeons against the unnecessary and sometimes criminal mutilation of women by ignorant and unscrupulous men.

At the recent meeting of the American Gynecological Society at Washington, composed of men who are as learned and successful surgeons as are in the world, there was a determined and nearly unanimous effort to impress upon the medical profession the wisdom and benefits of conservative gynecology and the evil of needless use of the knife in laparotomy. Dr. Doleris, one of the best men in Paris, has fearlessly discussed the subject: "Too many needless mutilations, not enough conservative gynecology." His extensive gynecological practice affords excellent opportunities for observation, and his conclusions were that eight tenths of the women upon whom laparotomy or hysterectomy has been done submitted needlessly to the operation, and that in Paris alone there are 4,000 women who have been deprived of their ovaries or uteri without sufficient cause.

Dr. Wathen said he had no apology for any one who was incited to these operations by a mania to record a series of successful laparotomies, but he denied that the abuse was so far-reaching in this country. He quoted Doleris as saying the whole truth is unfortunately not always told. One operator has claimed that the patient obliged him to operate. No disease could be clearly diagnosed, but he removed the uterus tubes and ovaries all in perfect condition of health. Could the patient have forced him to throw her out of the window? The author related numerous instances in his own observation where the surgeon had decided to operate upon women where there was no indication for an operation, but was prevented from doing so by the timely interference of a consulting physician.

He has practically excluded antiseptic or chemical germicides from the operating-room in intra-peritoneal surgery, and depends upon perfect surgical cleanliness. Since doing so, his patients make an uninterrupted recovery, without fever or acceleration of pulse. Most of his recent abdominals were done in an elegantly prepared operating-room, where all the details may be conveniently made aseptic, which can not be so easily done in private houses. He gave the latest accepted opinions of the relation of bacteria to septic peritonitis, described his improved method of suturing the abdominal incision, and concluded with a report of a long series of successful laparotomies, illustrating the conditions, indications, and necessity for an operation, and the results following it.

DISCUSSION.

Dr. T. B. Greenley: I desire to make a few remarks in regard to a laparotomy wherein the operation did a good deal of good without excirpating the tumor. I had the opportunity of seeing the patient previous to the operation. She was suffering a good deal of pain, and had to be kept under the influence of an opiate. I recommended the doctor in attendance to have an operation performed, as the tumor was evidently a large one. Of course we could not diagnose the character of it. After bimanual examination we thought possibly it might be either a fibroid or an ovarian tumor; but there
was so much tenderness in the locality of the growth that the patient could not bear manipulation, and we did not put her under anesthesia. Dr. Wathen finally operated on the case, but the adhesions were so great that it was extremely difficult to release them. The tumor was so crowded with the womb and bladder that it was impossible to free it, therefore he only released those bands that were causing the pain, then sewed her up. She remained a few weeks at the infirmary and since that time has been quite comfortable, has suffered no pain, and is able to be up. Dr. Wathen regarded the disease as sarcoma. The idea of giving her comfort is a great consideration.

Dr. Wathen: Dr. Greenley wishes me to explain something about the operation he refers to. I did a laparotomy, separated adhesions as thick as my hand in the pelvis, and found that the tumor was malignant. It was impossible to remove it, consequently it was left and the abdomen closed. There was one peculiarity in the case that I have never seen before. The tumor was in the adnexa of the uterus on the left side, had worked its way under the sigmoid flexure, and was growing directly over its surface; not by adhesions, for it is a common occurrence for the sigmoid flexure to be adherent to pelvic exudates. It was not under the adhesions. The growth was crowding down under the peritoneum, getting over the sigmoid flexure. I do not remember having read of a similar case in literature.

(to be continued.)

Reviews and Bibliography.


This is the well-known edition of Hippocrates translated and annotated by Dr. Adams for the Sydenham Society. It is got up in antique style identical with the original publication of the Society, and presents a distinctly unique appearance. Presented as it is here in the garb of a superb translation, and with the requisite explanatory notes and commentary, one ceases to wonder at the spirit of worship almost with which it was regarded by the physicians of so many hands and so many centuries. Aristotle is said to have credited Hippocrates with having divorced medicine from philosophy. We scarce can discern how such doubtful merit can be accorded him, since in his hands medicine truly became philosophy.

Hippocrates is one of the marvels of ancient learning, and it is becoming for every physician, even to-day, to read this grand master. When we turn from the world of hasty, slipshod work of the present boasted age of science, it is enough to make us feel a sense of profound humiliation to read the thoughtful, earnest, and dignified utterances of this great man of twenty-three centuries ago. What then, when we compare it with the centuries of the middle ages!

The translations and notes have conferred and will confer lasting honor upon the modest editor.

D. T. S.


This is a neatly gotten up work and fairly representative of the most advanced teaching on the subject to which it relates. The most important departure from accepted teachings is perhaps the contention of the author that albuminuria is never a normal phenomenon, but always indicative of disease.

In treatment there is nothing beyond the accepted teachings that seems to promise better than a great number of things that might be taken up as variations.

The author sets forth strongly his modification of Tarent's test for albumen, which, indeed, is one of the most delicate.

There is one feature in the work that to not a few may be unpleasantly suggestive; that is, the continual recurrence of the personal pronoun in the first person. We are unable to recall a work, large or small, in which this so often occurs. Most readers think more highly
of a work that in its style and methods gives credit to the common stock of knowledge for nearly all that it contains of value.

D. T. S.


This atlas is prepared much after the plan of the great work of Dr. Carswell that has been so long prized as a treasure by those fortunate enough to possess it. The work is characterized by the same genius, learning, and skill that mark Dr. Carswell's, and in addition has all the advantages of modern progress.

The parts already published indicate the involvement of immense labor, and no inconceivable expense. The plan is to give faithful illustrations of the various forms exhibited by any disease under consideration, and to accompany this with a careful letter-press description of the disease. This is printed on very thick hand-made paper, in quarto form, and given out in fasciculi of about fifty pages each.

It is truly a great work and can not be too highly commended. Of this it may with confidence be said, that unless the order of medical book-making changes, this work will be handed down to those who come after us as a treasured heirloom and remembrancer of the learning, industry, and painstaking genius of the present age.

D. T. S.


Dr. Schachner prefaces his "Studies" with a résumé of the symptoms and treatment of injuries of the kidneys, and concludes with the details of fifty-three experiments made upon dogs with a view of ascertaining the effect of different injuries of the kidneys, and of investigating the methods and results of nephrolithotomy and nephrorraphy.

The various experiments are illustrated by a number of cuts, most of them of a superior character. The style of the writing is peculiarly clear and expressive. But the patience, perseverance, and accuracy in the experiments made form the special merit of the work.

A half hundred careful and intelligently conducted experiments, such as these here detailed, are worth volumes of theories; and if the spirit of the age is somewhat against this form of venesection, even under chloroform, it may be answered that very much valuable time might be lost before proper treatment of injuries of the kidneys might be learned from accidents in the human subject. We have here a real and valuable contribution to our knowledge of injuries of the kidneys and their treatment.

D. T. S.


We must award this work the praise of having the shortest preface we have ever met, only two short sentences: "The presentation of new facts," says the author, "is chiefly the origin of this small volume. A résumé of the coal-tar products used in medicine is also a want not fully supplied." We can readily see how the presentation of new facts might be the aim or end of a small volume, but it does not so clearly appear how it might be the origin. Again, we are not able to see how a résumé is a want.

Meeting with language so loose and inaccurate in the short preface, we incline to make equally short reading of a preliminary discourse on the philosophy of fever.

We then come to his résumé, which possibly supplies a want, and, at all events, is made up of selections from leading authorities.

D. T. S.


In reviewing the first volume of this work, we stated that if the second volume was of equal merit, it would take place at once at the head of all works of its class.

The second volume shows no falling off from the high standard, and sustains the estimate at
first made. Some operations much esteemed in this country, and some methods are not held in equal repute by the author; but as to which is best, every gynecologist may judge for himself, for no man who is engaged in the study of diseases of women can afford to be without this superb treatise.

D. T. S.


This work evidences extensive study and a wide range of reading. The views on the whole seem sound, but unity does not appear to have been kept sufficiently in view, and there is a prevailing prolixity that prevents interest. In view of the fact that works of the most superior character and by the most eminent authors already occupy the field, this is likely to be read only by the author’s students and personal friends.


This little work has been brought out chiefly for the use of medical men in India. It is a synopsis of the more recent remedies with therapeutic notes brought up to date.

To show how carefully the author scrutinizes the therapeutic field, we may give its notice of a product that is found ordered in some prescriptions on file in Louisville: “Antikamnia is the name given to a nostrum consisting of antifebrin mixed with sodium salts.”

Mortality from Influenza. — The first quarter of the year 1892, in New York State, showed an abnormally high death-roll from local diseases. The Secretary of the State Board of Health, for that State, makes an estimate that not less than 10,000 persons died there, in January, February, and March, from epidemic influenza or from diseases predictable upon that epidemic.

Correspondence.

LONDON LETTER.

[From our special correspondent.]

Cholera, Dengue, and Influenza in the Lebanon; New Antidotes for Old Poisons; Dr. Ritchie’s Successor; French Lebel Bullet Wounds; Epidemics, Plagues, and Fevers; Larvae Attacking the Nasal Cavities of Toads and Frogs; Professor Foster’s New Work; New Sanitary Plans, etc.

According to Dr. B. L. Manasseh, who resides at Mount Lebanon, Syria, the history of cholera in that country has never, till last year, recorded cases occurring in lonely places or on the mountains 3,000 feet high. But last year there were some such cases. He considers there is apparently some hidden connection between influenza, dengue fever and cholera, as the form of influenza in which he found the head symptoms predominated closely resembled dengue fever, and that in which intestinal catarrh was the chief affection resembled cholera nostras, which in its turn he looked upon as a mild form of Asiatic cholera. In Syria, Dr. Manasseh says, cholera is called "the yellow wind," but the old Arab writers never mention it under that name. In their books it is called "hydeh," which means sickness and diarrhea combined. The first mention he finds of it in Syria was in 1817, when the epidemic appeared in Arabia and Egypt, and in 1818 it came to Beyrut for the first time from Egypt, and spread thence to Damascus. It lasted about three months, and when at its height the deaths were estimated at 1,000 a day. It appeared again in 1855, having been imported by the pilgrims from Mecca; it then came to Beyrut and left in the beginning of the winter, being succeeded by dengue fever. Since then cholera and dengue fever have visited the country at frequent intervals.

Mr. Percy Franklin, F. R. S., recently, in a lecture on "New Antidotes for Old Poisons," said that the word poison was very vaguely defined, and was used by different people with different significance. Some used it for any thing taken into the system that was deleterious, even if it did not produce death, and others
used it for that which caused death. He thought that no one definition could cover the whole ground. He particularly drew attention to the great effect in results the position of the bite by a mad dog had in cases of rabies. Bites in the head gave 85 per cent, in the hands 25 per cent, and in the other parts 0 per cent in deaths.

Mr. Ritchie, President of the Local Government Board, has appointed Dr. R. Thorne Thorne, F. R. S., to be principal medical officer of the Board, in succession to Sir George Buchanan, resigned. Dr. Thorne Thorne has done excellent work in connection with his department, to which he was first appointed in 1871. He is lecturer on public health at St. Bartholomew’s Medical School, and one of the examiners on the same subject to the universities of Oxford and London, and is the author of a work on diphtheria and of several publications on infectious diseases.

Surgeon Major General Bardenleben of the German army has lately submitted a demanded report to the Emperor William on the effects of the French Lebel bullets from his own practical observations. The results he has arrived at are: (1) The wounds inflicted are exceedingly grave in their forms of laceration of the flesh and the destruction of the bones in contact with the bullet. (2) The dressing and treatment for shot wounds hitherto employed by army surgeons or others no longer suffice to palliate the severity of the wounds produced by the same projectiles. (3) The next great war, by the mere fact of the destructive powers of the French Lebel bullet, will cause more deaths than healing wounds without serious after consequences, and an enormous number of combatants will be rendered helpless cripples and permanently infirm for the rest of their lives.

The Hon. Rollo Russell has published a book called “Epidemics, Plagues, and Fevers.” The author sums up “the gist of sanitary science” in two principles: cleanliness and isolation. To these he would like to add for the purposes of efficient control in State a third, namely, unity of administration. The chief causes of epidemic and transmissible diseases are traced to the three general conditions of flooded or marshy soil, decaying organic matter, and contagion or infection from sick to the healthy, all of them more or less preventable if only proper arrangements are put in force.

Dr. Leonard Guthrie recently had in his possession a toad whose mouth and nostrils were attacked during life with the larvae of blow-flies. When first discovered the toad was in good condition, with the exception that there was some discoloration about the nostrils, they being slightly enlarged and emitted a frothy discharge. Within them could be seen a mass of living larvae. Within thirty hours of this discovery the nostrils formed one large cavity, separated by a thin layer of skin anteriorly; both eyes were collapsed, their empty tunics lying in the cavity of the mouth; the whole of the soft palate had been devoured by the larvae, the bones being picked clean. After the death of the toad, between three and four dozen larvae were removed. Until the present instance no successful attempt had been made to identify the larvae which were known to occasionally attack toads and frogs. Dr. T. S. Cobbol referred to the subject in 1880, but was unable to name the maggots. Dr. Guthrie sent the maggots he had obtained to Profes-sor Brauer, of Vienna, and he pronounced them to be “calliphora.” They were not bone parasites, as they speedily destroyed the life of their host. No explanation could be given why the mouth and nostrils of batrachians were always the sole parts attacked, the probable explanation being that the eggs were laid in the toad’s or frog’s mouth while a pregnant fly was being swallowed. Dr. Leonard Guthrie at a recent meeting of the Pathological Society mentioned parallel instances in which human beings had been attacked by the larvae of blow-flies, especially mentioning recorded cases of convicts in the penal settlement of Cayenne, whose nostrils and eyes had been almost entirely devoured by the larvae of Lucilia hominivorax.

Dr. Poland has recently had under his care an interesting case of fracture of the glenoid cavity. The patient, a male, aged forty-six, had fallen a distance of about thirteen feet, and eventually died from head mischief. The glenoid cavity was fractured in a stellate manner, three lines of fracture running from this in the body of the scapula.
The fourth volume of the new edition of Professor Foster's Text-book of Physiology treats of the senses, special muscular mechanism, as the voice and locomotion, and the tissues and mechanism of reproduction. In writing of the muscular sense, Dr. Foster says he believes it is a true sense dependent on a variety of afferent impressions, and not due to a sense of effort accompanying the outgoing impulse. On the question as to how sound waves are converted into nervous impulses, he thinks that the piano theory of Helmholtz, in which the fibers of the basilar membrane are supposed to act as resonating strings, is unsatisfactory, but he is at present unable to offer any alternative explanation.

Dr. Willoughby has prepared plans showing an arrangement by which complete interception, ventilation, and means for exploration and flushing may be secured for an entire block or street section at a minimum cost, at the same time avoiding all drains beneath houses. He carries a common drain in the rear of each section from the footway of one cross street to that of the next, into the sewer of which it would discharge. A manhole is provided in the footway at each end, with provision for ventilation. Into this he leads from the houses on one or both sides the private drains, vented by their soil pipes and uninterrupted by siphons. He also suggests that all the houses in a section of a street be supplied with water from a common cistern, placed in a brick chamber, accessible only through a door, the keys of which should be kept by the sanitary inspector and the turncock. This would effectually do away with the difficulty of keeping a number of small private cisterns clean and properly covered.

London, May, 1892.

Ghillany calls attention to the property possessed by diuretin of absorbing carbonic acid from the air, and so becoming insoluble. He recommends that for dispensing purposes a solution of the drug in distilled water should be kept in well-stoppered bottles. — London Lancet.

Abstracts and Selections.

Salol in the Treatment of Typhoid Fever.—In the writer's opinion, the greatest advance made in the treatment of typhoid fever since the discovery of its true pathology has been in the enforcement of absolute rest and a liquid diet. The judgment of the effects of drugs in the treatment of such a disease as typhoid fever (which, given rest, careful nursing, and a liquid diet, tends in the majority of cases to a speedy recovery) is necessarily fraught with the greatest difficulty. To say that a certain case would or would not have recovered, after a certain line of treatment had or had not been followed, is impossible. So far as my experience goes, the antipyretic, antiseptic, and other methods of treatment, notwithstanding the favorable statistics published by their adherents, have done perhaps but little to affect the natural course of the disease. I, with all other observers, have been naturally dissatisfied to stand by and see a disease so common, and so frequently fatal, play havoc with the health of many of our patients, without at least attempting to do something toward overcoming this enemy of mankind. I offer the observations here made upon the use of salol in the treatment of typhoid fever, with the full belief in the statements above made. I would be distinctly understood to say that I do not consider salol a specific in typhoid fever, but I think I am justified, basing my belief upon the cases here reported, in saying that salol is a useful remedy. I do not think it materially shortens the course of the disease, and it certainly does not lessen to any marked extent a high temperature, though it may perhaps, as it seemed to do in some of my cases, prevent a continuance of high temperature. It certainly controls the diarrhea, changes the character and fetor of the stools, and relieves the annoying condition of dryness of the mucous membrane, so generally observed in cases of typhoid fever. The cases here reported have mostly occurred in my private practice. Some few, however, are taken from my records at St. Timothy's Hospital, Roxborough. They are in no sense selected cases, my sole object being in reporting the cases to show whether or not salol has a beneficial influence in the treatment of typhoid fever.

1. William G. had been sick for a week, temperature being 104°, with severe headache and nosebleed, with rapidly increasing weakness, and a few red spots upon the abdomen. He was at once put to bed, with a liquid diet, and given no medicine but salol in five-grain doses every three hours. His temperature gradually fell to normal, reaching in a few days 98.5°.
His tongue, which at my first visit was dry, soon became moist. His bowels, which were loose, became natural and the hebetude cleared up.

2. Clara C., June 25, 1890, had not been well for several days. Bowels being constipated, severe abdominal pains existing, with some headache, pain in the back, spots upon the abdomen. Temperature was 103.5°. She was put to bed and was given salol in five-grain doses every three hours. Next day she was very restless, temperature being 101.5°, with some slight delirium. Spots appeared upon the abdomen.

On the 28th the tongue was coated in the center, the edges were red, and the temperature ranged from 102° to 103°. Throughout the whole course of the disease the tongue never became dry, and the bowels were continually constipated. The convalescence began on the 14th day of July. From that time on the case went uninterruptedly to a complete recovery.

3. I was called to see John P., August 4th. Red spots upon the abdomen, diarrhea, headache, backache, and Restlessness were found. There was no nosebleed. His temperature was 102°. No delirium or abdominal tenderness existed. The abdomen was not distended. The next day the bowels were moved once, but not diarrheic. The temperature was 100.5°. His pulse was slow.

On the 8th he became very restless. There was no delirium, but he slept absolutely none at all for seventy-two hours. The spots appeared upon the abdomen on the 11th of August. The temperature reached the normal line on the 26th. The patient made a good recovery. He was given nothing but salol and a milk diet.

4. Edward H., August 7, 1890, was not very well for several days, suffering from headache, restlessness, and diarrhea, with pain in the iliac region. His pulse was 84, temperature 103° in the morning, and in the evening 103.8°. Last evening he had a chill and severe diarrhea. The chill was followed by sweat and high fever. The patient was given no medicine except salol. His temperature reached 104°. Spots appeared upon the abdomen on the 10th. Diarrhea ceased. There was never any delirium. The tongue never became dry. He made a good recovery, and was out of bed on September 3d.

5. Lydia W. was taken sick on the 31 of August with unquestionable signs of typhoid fever. She was put to bed on milk diet, and given salol. There were no bad symptoms throughout the whole course of the disease, and the patient was up and about in four weeks. The urine at one time became scanty, and contained traces of albumen. No casts were ever found. Notwithstanding the albumen, the salol was not stopped, and the albumen did not increase, but the urine cleared up.

6. Ray S. was seized during the influenza of 1890, with what was supposed by her parents to be the "grippe." A careful examination, however, showed a temperature of 103.2°, the pulse 120. Spots appeared upon the abdomen. She was put to bed, and given no medicine but salol. There were never any bad symptoms, and in four weeks she was up and about.

7. Annie S., aged ten years, was seized with an undoubted attack of typhoid fever and diarrhe. She had a coated tongue and severe bronchitis. In three weeks' time, under the use of salol, the temperature had fallen to normal. Salol was now stopped, and the temperature began to rise without any indiscretion, so far as could be discovered. Salol was immediately recommenced, and the temperature again fell to normal. The same thing occurred again during the course of the disease. There was a severe attack of capillary bronchitis. She made a thoroughly good recovery, but the disease was not shortened.

8. William A. had a light attack of typhoid fever. The patient took salol continually, his temperature ranging about 102°. On the 4th of June his temperature suddenly fell to normal, but again rose. The case finally presented a normal course of convalescence in typhoid.

9. Sallie T., November 10, 1889, had been complaining for several days of a dull sensation, headache, aching of limbs, and coated tongue, dry and red tip. Temperature was 103.5°. She was given salol in five-grain doses every three hours. Next day her temperature was 101°. On November 12th her temperature was 102°, and tongue was dry. There was no medication in the case except salol. The temperature never rose above 102°. The tongue, which was dry on the third visit, at once became moist. There was never any diarrhea. She made a speedy recovery, and was out of bed in the third week.

10. Samuel L. was seized with signs of typhoid fever, with a moderately low temperature never rising above 102° in the evening. He was at once put upon salol, and was given no other medication. This case developed, on the second week, a small abscess on the jaw, and in the third week phlebitis of the left sapheous vein. Although the temperature never rose above 102°, the course of the fever was unusually long in reaching the normal line, the patient not being about until the end of the seventh week. Apparently salol had no absolute effect on this ease.

11. George L., living in the same house with the previous patient, was seized on the 19th of
August with signs indicative of typhoid fever. The temperature in the morning was 102°. He was put upon salol, but in spite of the drug the temperature gradually rose. All the symptoms increased in severity. The tongue became dry, diarrhoea intense, stools fetid and involuntary. The patient seemed in a typical typhoid condition, when salol was stopped. This case afterward progressively became worse, and the patient died at the end of the third week.

12. Frank F. on August 18th was seized with headache, chilly sensation, aching limbs, and diarrhoea, and had a temperature of 103° in the evening. He was at once put upon salol. The temperature next morning was 101°, and ranging from that up to 103°. During the course of the fever typical typhoid spots appeared, and the spleen became enlarged. There were never any bad symptoms, and at the end of the fourth week the patient was down stairs. There was no medication given except salol.

13. Harry X., October 18, 1889, had not been feeling well for three days, having pain in the abdomen, headache, limbs-ache. Temperature 103°, pulse 112, restlessness, and with bowels moved. He was given salol. On October 3, 1889, his temperature was 103°. His bowels were not loose. His spleen was slightly enlarged. Temperature in the evening was 105°. Notwithstanding the high temperature the patient seemed but little worse. This case was not shortened, and except at one time, when the temperature reached 105°, there were never any bad symptoms. The diarrhoea ceased. There was never any delirium. The patient was about his room in four weeks.

14. Annie B. was seized with what proved to be typical typhoid fever, beginning with a temperature of 103.5°. Her bowels were very loose. She was at once put upon salol, without any other treatment; but in spite of five grains every three hours the temperature steadily rose to 105° in the evening. Feeling that the drug had been used to the limit of safety, it was stopped, and she was put upon antipyrine treatment. After a long illness, including a relapse, the case finally recovered.

15. Salie B., April 11, 1890, had not been well for several days, but had been up and about the house. She had diarrhoea, her tongue was coated with a red tip, and her lips were cracked. Her temperature was 101°.

On April 13, 1890, typhoid spots appeared. In the evening, temperature 102.5°. She was at once put to bed and given salol. The diarrhoea decreased. The temperature fell to normal, reaching that point at the end of the second week of treatment. The patient seemed to be convalescent, when she was seized with a uterine hemorrhage, due to a miscarriage. She was allowed to bleed all night without any attempt being made to check it. The next morning she was dreadfully shocked and almost pulseless, presenting a typical picture of excessive hemorrhage. She died on the third day after the hemorrhage. This case, as previously stated, was convalescent when killed by the neglected hemorrhage.

16. Mrs. II. was seized with moderately high fever, temperature being 102° in the evening and 101° in the morning. Diarrhoea, headache, and general malaise existing. She was at once put upon salol. Typhoid spots appeared, and the case proved to be a mild form of typhoid fever. There were never any bad symptoms, and she was up and about the house at the end of the fourth week.

17. Mabel E., aged sixteen years, May 4, 1890, had not been well for a week, having headache, coated tongue, and diarrhoea. Her temperature was 101°, her pulse 142. This was after having walked to my office, a distance of several squares from her house. There were spots on the abdomen, which appeared to be typhoid spots. She was at once sent to bed, put upon salol and a milk diet. This case made a rapid recovery, being up and about the house at the end of the third week.

18. David F. was a typical case of typhoid fever, temperature never rising above 102° in the evening. There was never any treatment used but salol and a milk diet. The man made a good recovery, being up and about the house at the end of the fourth week.

19. James J. showed a typical attack of typhoid fever. There was no other treatment but rest, liquid diet, and salol. By taking five grains of salol every three hours this man's urine became a dark-greenish color, but never contained any albumen. There were never any bad symptoms, and the man made a good recovery by the end of the fourth week.

20. Fred. F., October 11, 1890, had been sick for one week with headache, fever, diarrhoea, and dry tongue. He traveled in an ordinary passenger car from Jersey City to Philadelphia one week after he had been taken sick. On examination his tongue was found to be dry. He was pale, his pulse was rapid, and his temperature was 102°, and the spleen was enlarged.

On October 12, 1890, he had bad-smelling stools. Within twenty-four hours there was a slight delirium. His pulse had a tendency to diacrotism, the spleen could be felt below the edge of the ribs, and his face was flushed. On October 13, 1890, spots of typhoid fever appeared. No other treatment was used except the administration of salol. From the beginning of this treatment there were never any
bad symptoms. The man made an unusually good recovery.

21. Jacob H. exhibited a slight attack of typhoid fever. There were never any bad symptoms throughout the whole course of the disease, and the man made a good recovery, being out of bed at the end of the second week. There was no treatment except salol.

22. William A., November 14, 1891, had not been well for several days, experiencing sleeplessness, chill, pains throughout the body, with much headache, and a temperature of 102°. He was given salol.

On November 15, sleeplessness and headache were present, but no delirium, although his eyes were congested. Temperature was 104.8°; pulse, 88. He was then given five grains of phenacetin. At 9 o’clock in the evening his temperature was 100°; after this the temperature ranged between 102° and 103°. There was a slight tendency to suppression of the urine. On one occasion the temperature fell suddenly to normal, but the pulse was full and strong. The only drug treatment was salol, with the exception of the single dose of phenacetin. Except on the third evening the temperature never rose above 102°, reaching the normal line rather abruptly at the end of the second week of treatment. His recovery was full and complete.

23. May W., aged ten years, January 13, 1891, had not been well for a week, but had not been in bed. She simply complained of malaise. Her temperature was 102.5°, with no headache, no diarrhea and no delirium. She was at once put to bed and given salol. Genuine typhoid spots appeared on the 16th. On the 22d she seemed perfectly well, but her temperature remained at 102°, and her pulse was good and regular. Her bowels were never loose. On the 25th the temperature still remained at 102.8°, without any other bad symptoms.

On the 29th her temperature was 105°. All this time she was given salol. On the 30th she began to have delirium, dry tongue and restlessness. That evening her temperature was 105.2°.

On February 1, involuntary stools appeared. There was no lung complication. Salol was now stopped, and she was put upon antipyretic treatment, but died, with an exceedingly high temperature and tetanic condition of the muscles, on the 8th.

24. Rachel S., February 5, had diarrhea, headache and tympanites, with a temperature of 103°. Typhoid spots appeared upon the abdomen.

On February 8, her temperature was 103.5, the bowels were moved frequently, and were exceptionally loose, and the passage was exceedingly foul in odor. On the 10th the salol was increased; she had been taking three grains every three hours; it was now increased to three grains every two hours. On the 11th the pulse was slower, the temperature being 102°. A slight amount of albumen was found in the urine. On the 13th she had passed no urine for twelve hours. Notwithstanding this fact, the salol was not decreased. On the 14th the urine was re-established, the tongue was cleared, and the diarrhea was better; there was no albumin, and no albumin in the urine. On the 19th the temperature reached the normal point, and remained there until the convalescence was completely established.

25. Sadie N., January 22, had a slight attack of undoubted typhoid fever. She was at once put upon salol. There were never any bad symptoms, and she was up and about in the third week.

26. Leon K., March 9, 1891, had backache, headache, and pain in the arms. His temperature was 105°; bowels were constipated. Temperature in the morning was 101.5°, and in the evening 102.5°. This case was given salol. His temperature ranged between 102° and 103.5°. The temperature reached the normal line at the end of the fifth week. At one time there was a trace of albumen in the urine, but no casts were found. The salol was not stopped, and the urine cleared up. There were never any bad symptoms, except a moderately high temperature.

27. Roy P. had been sick for a week, with the regulation signs of typhoid fever, temperature being 103.5°. He was put upon salol. The tongue became dry and red, but after a few days again became moist. The looseness of the bowels, which had never amounted to a positive diarrhea, ceased, and the patient became constipated; the delirium disappeared, and he made a good recovery at the end of the fourth week.

28. Frank N. was a mild case of typhoid, with no serious symptoms. He was put to rest on a milk diet, and no drugs except salol were used. His temperature never rose above 103°. There were never any bad symptoms. The patient was out of bed at the end of the third week.

29. John S. was seen for another physician. He was supposed to have influenza, but after being watched, showed that he had an undoubted attack of typhoid fever. He was at once put upon salol; his temperature, which had been ranging at 104° in the evening, never rose above 102°; the delirium, which had been marked, now disappeared, and the tongue, which had been dry, became moist. The man
made a good recovery after a lingering illness of six weeks.

30. Annie M. had been ailing for two weeks with symptoms indicative of typhoid fever. On the first visit her temperature was 104°. She was at once put to bed on a liquid diet, and given no drug but salol. At the end of the fourth week her temperature was normal. There were never any bad symptoms through the whole course of the disease. She made a good recovery.

31. Charles N. had lived in one of the wards of the city, where he had been sick for several weeks with what was considered by his physician to be typhoid fever. He was allowed to go to his work in the mill. He was again taken ill, and came under my care five weeks after he was first taken sick. His temperature at my first visit was 104°; his bowels were very loose, his pulse 96. He was at once put upon salol; five grains every three hours. On the third visit the urine was discovered to contain a few hyaline casts and traces of albumen. The salol was not stopped, however, and the urine speedily cleared up, the man making a good recovery—his temperature being normal at the end of the second week of treatment.

32. Thomas Bisch was seen for a friend. He had been sick for six weeks; his tongue was dry, he was exceedingly delirious and deaf. His bowels were moved involuntarily, his urine was scanty, and he presented a typical picture of typhoid poisoning. He was at once put upon five grains of salol every three hours. Within forty-eight hours after taking the salol the tongue became moist, and the diarrhea ceased. He made a speedy recovery, the temperature being normal one week after the time of the beginning of the salol. This case may not be a fair test of the use of salol, as the patient had been sick for a long time, and the time of convalescence must surely have been drawing near; but I make the report because of the speedy improvement of the case after the beginning of the use of the salol.

33. Emmet F. had been lying about the house for a few days with fever, diarrhea, and general malaise. His temperature was 103°, and there were undoubted typhoid spots on the abdomen. He was at once put upon a milk diet and given salol. Eleven days after the beginning of salol, the temperature was normal, and the man made a good recovery.

34. Thomas W. had a severe attack of typhoid fever. Salol was used from the beginning. The man was delirious for a week, his tongue was dry and cracked, and he showed presently a typical case of typhoid poisoning. By the end of the third week the temperature was normal, and he made a good recovery.

35. Martha L. probably contracted typhoid by direct contagion from the other case. She was a woman of nervous temperament, and at the time of being taken by the fever was laboring under great family troubles. Upon discovering the fever, she was at once put to bed and at re-t, and given salol. Notwithstanding rigorous rest, the case proved unmanageable, and she died at the end of the third week.

36. Mamie W., aged twelve years, was admitted to the ward of St. Timothy’s Hospital, December 2, 1890. This was a typical case of typhoid fever, with a temperature ranging from 102° to 103.8°. At one time there was a partial suppression of the urine. She was given no medication but salol, and made a good recovery.

37. Ellen H. was admitted to St. Timothy’s Hospital, November 15, 1890, with a typical case of typhoid fever; the fever ran a course of four weeks. No other medicine but salol was given. There was no delirium; diarrhea never appeared during her stay in the hospital.

38. Harry H. was admitted to the wards of St. Timothy’s Hospital, suffering from symptoms of typhoid fever. On the second day a copious rash appeared over the abdomen, typically typhoid; the man was given nothing but salol. The case proved an abortive attack, and he was about the house in two weeks.

There were three cases admitted to St. Timothy’s Hospital, all of which had been sick for a very long period before admission. Two of them had intestinal hemorrhage forty-eight hours after admission, the other one intestinal perforation. These three cases are not included in the above list, for what, perhaps, is a very good reason, that they were not sufficiently long under observation to be a fair test of the effect of salol either for good or ill. They are mentioned, however, that it may be seen that salol certainly does not have a curative effect on severe intestinal ulceration which has lasted for a long time, and also that they may be compared with those severe cases of typhoid which are said to be affected so favorably by the cold bath treatment.

The literature upon the use of salol in typhoid fever is meager, at least that which is upon record in the Index Medicus. Of these opinions a few will be quoted:

Pier Vigier says salol is inferior to salicylic acid in typhoid fever, it not being an antiseptic to the intestines, and only moderately antithermic. His results have been entirely negative.

Lombard has used salol in typhoid fever and found his results entirely negative.

Georgi says that salol in doses of thirty to forty grains causes a decided fall of temperature in typhoid fever within three to four hours.
Heerlich used salol in eight cases of typhoid fever with certain favorable results; the antipyretic action was never excessive. Intestinal symptoms did not seem to be favorably affected.

Alivia reports four cases of typhoid fever treated with salol; the temperature gradually fell in all the cases, and no bad effects were noted.

Of the thirty-eight cases here reported, four died; of the deaths, one, as will be seen by reference to the notes recorded above, was caused by neglected uterine hemorrhage. The case would probably have recovered if the hemorrhage had not been neglected; leaving three deaths which can be fairly included under the cases treated with salol, a mortality of little less than eight per cent.

Diarrhea was controlled, or did not appear, in thirty-five of the cases. The dryness of the tongue was either relieved, or did not appear to any marked extent. Delirium appeared but in six cases. In one case there was a sudden drop of temperature, resembling that which occurs after a severe hemorrhage. Intestinal hemorrhage did not appear in a single case.

Special attention should be called to case No. 7. In this case it will be noticed that on two occasions, after the temperature had reached normal, or nearly to that point, and salol was stopped, the fever reappeared, without any indiscretion on the part of the patient, and that the temperature speedily dropped on again taking salol.

In case No. 10, the medication seemed to have no effect either for good or ill.

In case No. 11, the man rapidly grew dangerously ill while taking salol.

Case No. 15 was in a typical typhoid condition on beginning salol, and, in the course of three or four days, was very much improved.

Case No. 17 gave promise of a very severe attack of typhoid, but steadily improved upon beginning salol.

Case No. 20, though having traveled a long distance in a railroad train, and on the first visit was found to be in a bad condition, steadily improved after beginning treatment.

Case 23 became steadily worse while upon full doses of salol, but I have always suspected from more causes than one, that the nurse disobeyed orders in this case.

Case 24, a child, was doing badly upon three grains given every three hours, but speedily improved upon the doses being given every two hours.

Case 29 was markedly improved after beginning salol.

Case 32 is worthy of marked attention. This patient, before the use of salol, had been sick for several weeks. He had involuntary stools and urination, was unconscious, and had a high temperature. Within a short time after the use of salol all his bad symptoms had disappeared.

Case 35, though well nursed and upon full doses of salol, died.

To summarize: Of thirty-eight cases treated, thirty-five recovered. Hemorrhage did not occur once, diarrhea was either absent or quickly controlled in a great majority of cases, the dryness of the mucous membrane was either absent or markedly improved in a great majority.

This series of cases, with a death-rate of but eight per cent, while small, compares favorably with a like number of consecutive cases treated on the expectant plan. The urinary symptoms but in few of the cases were never badly affected; in some the peculiar greenish black color of the urine, characteristic of the elimination of salol, appeared very quickly, in others only after a considerable time. During the use of the drug tube-casts were not found, and cases where albumen existed were not badly affected by the use of the drug. While I would hesitate to use salol in cases of a true nephritis, the very general belief that salol is dangerous when used to the extent of coloring the urine is not supported by my experience with the drug. A partial suppression of the urine sometimes occurred, but the secretion was re-established without stopping the use of the drug.—Dr. M. H. Fussell, University Medical Magazine.

Does Ether Assist Digestion?—The effect of ether on digestive processes in healthy subjects has been recently investigated by Dr. Gurieff, who gave thirty drops of sulphuric ether to six healthy persons during dinner, which consisted of about half a pint of soup, four ounces of meat, and six ounces of bread. It was found that the ether had the effect of stimulating the action of the gastric glands, increasing the free hydrochloric acid in the gastric juice, and causing the peristaltic movements of the stomach, together with its power of absorption, to increase thus; on the whole, exercising a favorable effect upon the gastric digestion. The same result was obtained when the ether was administered by means of hypodermic injections. It would appear, therefore, that the effects must be ascribed to a general rather than to any merely local action on the mucous membrane of the stomach. Dr. Gurieff is disposed to think that there is a stimulation of the cephalic centers. This view is partly based on the observations of other Russian observers—Bekhtereff and Milosesvcki and Pavloff and Shumova-Simanovskaya—on the dependence of the gastric functions upon the central nervous system.—Lancet.
Salophene.—Salophene, prepared by F. Bayer & Co., is a derivative of salol. It is obtained by treating para-nitrophenol with salicylic acid, reducing the nitrophenol by means of zinc and hydrocholoric acid into an amide, and acting upon this with acetic acid. Salophene contains about fifty per cent of salicylic acid, and exists in the form of thin scales, tasteless, inodorous, and with a neutral reaction. It is almost insoluble in cold water, and only slightly so when warmed. Upon the addition, however, of an alkali it readily dissolves. It is very soluble in alcohol and ether. It burns with a smoky flame, leaving no residue. In the stomach salophene breaks up into salicylic acid and acetyl-paramido-phenol. These substances are excreted by the kidney, and can be found in the urine. Salophene, owing to the presence of amido-phenol, is less poisonous than salol. According to Guttman, it is a valuable remedy in articular rheumatism, given in doses of from four to six grams a day in pill or in the form of compressed tablets.—Ibid.

Effect of Alcohol on the Kidney.—Dr. Karl Glaser has found (Deutsch. Med. Woch., No. 43; Abstr. i. Fortschr. d. Med., No. 22, 1891) that the temporary ingestion of alcohol produces an irritant effect on the kidneys, as shown by the examination of the urine of a number of healthy young men in whom, prior to taking the alcohol, the urine was free from albumen. He found that the urinary sediment contained leucocytes and tube casts, as well as large quantities of crystals of oxalates and uric acid. He found also that the effect of a single potation did not last beyond thirty-six hours, but continued excess in drinking has a cumulative action. Even moderate quantities of alcohol have some influence in increasing the number of leucocytes, casts, and fatty degenerated epithelia. Still two individuals who each consumed from three to four liters of beer daily were exceptional in showing no tube casts, and it is surmised that their kidneys had become habituated to the action of alcohol.—Ibid.

Etiology and Therapy of Weak Labor Pains in Old Primiparae (Der Frauenartz, Hft. 9, 1891).—The weak labor pains so often observed in old primipare the author attributes to a beginning retrograde metamorphosis of the entire generative system. Absolute absence of pains in old primipare is to be considered the first indication of the approaching climacteric. The uterus of an old primipara has not the activity or physiological strength of one that has borne children. This the author considers the cause of tardy labors in these cases, and the reason why there is often so much risk to both mother and child, requiring careful watching on the part of the physician, and often the use of forceps, turning, sometimes even perforation, or incisions into the portio vaginallis cases where the os does not dilate sufficiently.—E. Börner, American Journal of Obstetrics.

The Treatment of Eczema.—The Gyógyszat publishes an account of Dr. Berthold Löwengard's new treatment of eczema. He had under his care a child six months old suffering from severe seborrhea, which had resisted all the ordinary methods of treatment. Upon having recourse, however, to a two-per cent solution of creoline, in three weeks' time the disease had entirely disappeared, not a symptom remaining. He has made use of a solution of creoline with equally favorable results in papular and pustular eczema and in eczema of the genital organs. One of the latter cases was complicated with anal fissure, but this healed in four days after treatment with creoline and strict attention to cleanliness. Dr. Löwengard was occasionally obliged to substitute other remedies for the creoline in the course of treatment, but he succeeded in all cases in relieving the painful symptoms of the acute stage.—London Lancet.

Europhen: A Substitute for Iodoform. Europhen is a very fine yellow powder, having neither a disagreeable nor a strong odor. It is one fifth as heavy as crude iodoform, while the finely powdered iodoform is two and a half times heavier than europhen. It is soluble in alcohol, ether, chloroform, benzine, and in fats and oils. Vulpius finds that anthrax bacilli are generally rendered inert by it. Staphylococci were essentially checked in their development, although perhaps not so much as under the influence of iodoform. Pyocyanus seemed not to be influenced by europhen. Experiments to determine its toxicity indicate that europhen is less poisonous than iodoform. It may be used locally in the form of ointment, powder, and gauze. It is recommended when rapid and vigorous granulations are to be excited.

Iodine-Mixtures, according to Dr. Mann, are best prescribed with molasses, because the glucose contained in the latter not only disguises the taste of the iodine salts, but also protects them against chemical changes.—Merek's Bulletin.

Angina Pectoris.—A writer in the Revue de Medicine recommends cocaine, in the dose of 3 to 4 grain, three or four times daily.
CHLOROFORM SYMCOPE TREATED BY MASSAGE OVER THE HEART.

It would seem that the conflict between those who claim that death by chloroform is always through suspension of respiration, and those who claim it to be due to syncope, is irrepressible and will never get its quietus.

Many surgeons grow angry if an assistant presumes to feel the pulse of a patient under chloroform, while many others study the behavior of the heart under like conditions with anxious solicitude.

It was thought that Dr. Brunton, through the experiments of the Hyderabod Commission, had settled the question for good and all on the side of respiratory suspension; but such paragraphs as the following are likely to cause the heart-failure parties to the controversy to take heart again, and to insist that the pulse shall be carefully studied in all patients under chloroform:

"Maas (Berlin. Klin. Woch., No. 12, 1892) reports two cases in which patients, apparently dead from chloroform syncope, were resuscitated by simple compression in the region of the heart. In both cases respiration and radial pulse had entirely stopped and the pupils had dilated. The manipulation of the heart was in both cases carried out for over an hour. As a result both patients suffered from mental de-

rangement, difficulty in swallowing, and in speech, all of which passed off very slowly. The manipulation was conducted as follows:

"The operator, standing upon the left side of the patient, pressed with quick, strong movements deep down in the region of the heart with the fingers of the right hand, while the ball of the thumb was placed above the left clavicle. The number of compressions was 120 or more a minute. The left hand should seize the patient upon the right side of the thorax. Soon after beginning these compressions the pupils became smaller and the paleness of the face disappeared."

LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.

The stated annual meeting of this Society took place on the evening of May 27th. The following officers were elected for the ensuing year: President, Dr. Frank C. Simpson; Vice-President, Dr. Thomas L. McDermott; Secretary and Treasurer, Dr. John S. Hays.

An address setting forth the Society's work for the year, and replete with practical suggestions for the Society's good, was delivered by the retiring President, Dr. William Cheatham.

At the close of the meeting the Fellows, with several invited guests, did justice to a superb collation spread by Dr. Turner Anderson.

OBITUARY.

DR. WILLIAM B. CALDWELL, one of the oldest practitioners of medicine and one of the best known men in Kentucky, died at his home in Louisville, May 19th.

Dr. Caldwell was born in Columbia, Ky., in 1818. He studied medicine in Transylvania University, and practiced for a time in Adair County, Ky. In 1846 he came to Louisville, where he built up a large practice which engaged his energies for many years. Some twenty years ago Dr. Caldwell, having acquired great wealth, gave up medicine that he might devote his time and attention to the management of his great estate.

As a capitalist he held many positions of honor and trust, and made his wealth useful in
the building of churches and the fostering of charities. He was a life-long member of the Baptist Church, honorable, consistent, and pious, a Christian, a gentleman, and a physician.

Dr. Douglas Morton, one of the best known physicians of Louisville, died at his home in this city, May 26th.

Dr. Morton was born in Virginia in 1844. After graduating with honor in the Hampden-Sidney College, he came to Louisville where he graduated from the University of Louisville just at the close of the war. He located in Shelby County, and after practicing a year or two, came to Louisville, where he pushed his way into a large and lucrative practice.

Dr. Morton was especially distinguished as a gynecologist, and did many successful operations in this branch of his calling. His contributions to American literature are familiar to our readers, most of them having been published in The American Practitioner and News. He was scholarly in his profession, modest and retiring in his disposition, and always a gentleman and a Christian. Few men of his calling among us have made greater attainments or won more worthily the confidence and respect of the community.

Dr. H. Clay Dembitz died in New York City, May 25th. His death was caused by erysipelas, incident upon a trifling operation in the nose.

Dr. Dembitz was born in Louisville, Ky., in 1861. His literary education was got in the public schools of this city and at Hanover College in New Hampshire. He studied medicine in Vienna, where he graduated with honor from the Medical Department of the University.

Returning to his native city he began work at once in his profession, and soon established himself in practice.

Dr. Dembitz was a man of fine mental endowment, and of great moral worth; he was studious in habit, and felicitous in the application of knowledge to practical ends. He was popular socially and professionally, and had many admiring friends. He had already attained a position of more than common useful-ness in his chosen calling, and his untimely death has cut short what promised to be a brilliant career.

Tobias G. Richardson.—This eminent Kentuckian and surgeon died at his home in New Orleans, May 26th. It is probable that in the last quarter of a century no son of Kentucky has cut a larger figure in his chosen calling.

Dr. Richardson was born in Lexington, in 1827. He graduated from the University of Louisville in 1849. His skill and knowledge of anatomy secured for him the position of assistant demonstrator of that branch in the University soon after he graduated, and later he became Demonstrator of Anatomy and assistant to the chair of surgery under Professor George W. Bayless. In 1856 he was, at the instance of Dr. Samnel D. Gross, called to a professorship in Jefferson Medical College, Philadelphia. Resigning this position in 1858 he went to New Orleans, where he soon became Dean of the Medical Department of the University of Louisana, which position he retained when this institution was merged into the Tulane University.

Dr. Richardson was a surgeon of great attainments. Just after the battle of Chickamauga he distinguished himself by doing the hip-joint operation upon General Hood. In 1881 he was chosen President of the American Medical Association, the highest honor that the American physicians can confer upon one another. Dr. Richardson was a man of great physical courage and moral worth. In his leisure hours he pursued the study of botany, and contributed no little to our knowledge of palms, orchids, and ferns. His collection of these plants is one of the best in America, and it is not improbable that upon things discovered here his chief claim to fame will rest.

Mouth-wash for Carious Teeth.—A mouth-wash said to prevent dental caries is as follows: Tannin, 5 grams; tincture of iodine and tincture of myrrh, of each 2.5 grams; potassium iodide, 1 gram; rose-water, 180 grams. The mouth is rinsed every morning with one teaspoonful to a glass of warm water.
Holes and Queries.

Keeley, Talmage & Co. (Unlimited), Dealers in Medico-Religious Humbug.—There have been many enemies of modern popular Christianity, and some have inflicted upon it powerful and grievous injury, but when the whole history shall have been written it will be found that by no agency has it been so vitally wounded as by its present-day unholy alliance with quackery. An ancient libel upon medicine has been crystallized into an old Latin proverb, meaning that two out of every three physicians are atheists. This, of course, is a lie, because no body of men is made up of more reverent and, in a true and essential sense, religious minds than is the medical profession.

It is a lie; but a certain class of modern religious clowns and caricatures are trying their best to make it true. If the simile may be pardoned, nothing would more effectually make a scientific mind vomit up the whole good dinner of religion than the nauseating stench of flatus so freely vented by these pseudo-religious demagogues.

For instance, we read (New York Herald, May 16th) as follows:

The Rev. T. DeWitt Talmage stood on the platform of the Brooklyn Tabernacle last night with Dr. Leslie E. Keeley, of Dwight, Ill., and helped to advertise that gentleman's institutions for the cure of drunkenness.

Several members of the congregation walked out of the church before the meeting was over.

Dr. Keeley, accompanied by his wife, went to Brooklyn in the afternoon, and after dining with Dr. Talmage went to the Tabernacle. Rev. Dr. I. K. Funk offered prayer, in which he called down the blessings of heaven on Dr. Keeley, who, he said, was "the glory of the nineteenth century." The congregation sang "Hold the Fort," and then Dr. Talmage introduced the lecturer, who, he said, would live on in centuries, and would eventually drive drunkenness and morphine off the face of the earth.

The lecture itself was uninteresting, and at its close Dr. Talmage announced that he would ask Dr. Keeley a few questions that had been given to him by prominent clergymen and physicians. He read the questions from a slip of paper which he held over a hymn-book. Here are some of them:

Q. Now, Dr. Keeley, tell this assembled multitude if there are any poisons in your cure. A. There is nothing deleterious, inimical, or hurtful in my cure. A child could drink a barrel of it and it would not do any harm.

Q. Does the temptation to strong drink pass away after a person has been through your treatment? A. A man never has any desire to drink again after being treated by me. My cure destroys all desire. If he goes back to drinking he does it deliberately, because he wants to lead the old life, and not because he has any desire for strong drink.

Q. How many persons under God have you been permitted to cure? A. Something over 60,000. Of this number 95 per cent have been permanently cured, and only 5 per cent have relapsed.

Dr. Keeley went on to explain, in answer to further questions by Dr. Talmage, that no analysis had ever been made of his remedy. He said that he defied analysis, and that no chemist on earth could tell what it is. He had been experimenting for thirty years, and could cure the opium or morphine habit just as easily as the drinking habit. He added that it was a mistake to call his cure the bichloride of gold. That name was given to it erroneously because of the gold clubs that had been organized throughout the country. He insisted that bichloride of gold is a chemical impossibility.

"What are your reasons for keeping your cure a secret?"

"It is a system. Drunkenness must be treated systematically. We could not hand it over to the doctors, because they would not handle it properly. I look upon my cure as belonging to the women and children of the country. If I gave out the formula the quacks would destroy it in a very short time. There are only three persons in the world who know the secret, and no one else will ever know it."

We have quoted at some length from this report, and for several reasons. We wish our readers to remember carefully several points contained in it, notably these:

1. Keeley's early advertising pamphlets and circulars expressly stated that the medicinal agent was bichloride of gold. The Medical News at once (November 14, 1891) pointed out the fact that a solution of bichloride of gold was a chemical impossibility. Then the later circulars and pamphlets changed the tune to "chloride of gold and sodium." The third change of attitude is indicated in the foregoing,
in the remarkable admission that a child could
drink a barrel of it without injury. Now, the
dullest comprehension can at once see that a
medicinal agent capable of producing such pro-
dound changes in the human system as the in-
jection is alleged to produce must, in barrel
doses, be somewhat injurious to children. Re-
ference to any work on materia medica will
hardly authorize the maximum dose of any
auric or aurous salt as a barrelful. In other
words, by Keeley's express admission, there is
no gold in the injection, however much there
may be in the business.

This self-confessed redactio ad absurdum of
the whole fraud will be confirmed. Suppose
that a "jabber" of one of the institutes, one of
the so-called physicians, should have the in-
jecting material analyzed by an expert chemist,
in order to set up a rival institute, and suppose
that, as a result of that analysis, it should be
found that in the injecting material used in the
Keeley institutes there is no chlorine, no chlo-
ride or bichloride of any thing, nor any gold
whatever. This would confirm Keeley's re-
markable hedging admission, that after having
invented a bichloride of gold cure, and then a
chloride of gold and sodium cure, there is no
gold salt wherever in a barrel of it. The gold
is in Keeley's pocket, put there by his dupes,
and especially by his religious co-partners.

2. Note that the original claims made were
that there were no relapses whatever. The
"Glory of the Nineteenth Century" now ad-
mits five per cent. How far this is from the
sad truth will be seen by and by.

3. The Glory also "defies analysis of his
remedy," and says that "no chemist on earth
could tell what it is." Will our readers bear
this in mind?

4. The statement of reasons by "The Glory"
for not giving the remedy to "the doctors"
would make an Egyptian mummy laugh. Alas!
that the Very Reverend Drs. Funk and Tal-
mage are devoid of a trace of humor.

The advertising pamphlet of "National Bi-
chloride of Gold Institute of Chicago" lies
before us, and contains process portraits of the
following Reverend Doctors of Divinity as its
indorsers and advertisers: Bishop Samuel Fal-
J. Wolfenden, D. D., Rev. W. T. Meloy, D.D.
Other representatives of modern Christianity
mentioned in the pamphlet as enlisted in the
holy cause of Keeleyism are G. B. Wilcox,
D. D., J. L. Withrow, D. D., Rev. Harry
Taylor, D. D., and clergymen galore! Miss
Willard and the W. C. T. U. are with The
Glory also.

But it is not only the genuine original fraud
that has the support of the reverend D.D.'s and
the religious folk. These, indeed, seem almost
to prefer the fraudulent imitations of the fraud.
For example, a correspondent writes us that in
The Voice, of New York, of May 5th, there
is a "three-column ad." of a certain Garten's
"Terechloride of Gold Remedy," indorsed by
the leaders of the W. C. T. U., by Funk and
Wagnalls, etc.

In the thousandfold advertisements of a cer-
tain unsafe cure, the most frequently quoted
and most enthusiastic commendations come
from doctors of divinity, bishops beloved, pas-
tors dear, and pious clergymen. It would al-
most seem as if "the Church" had gone into
the patent-medicine business. In whatever
newspaper you please to look the letters of "re-
ligious" teachers are paraded, indorsing the
most damnable of the quacks' concoctions. It
has become proverbial that such advertisers
well know both the ease of entrance to the col-
umn—advertising, reading, or editorial—of
what is known as the religious newspaper, and
also the paying value of such "ads."

Protestants have for centuries amused them-
selves by sneering at Catholics for the simple
faith that believed in the medical miracles
wrought by saintly relics, etc., but in all Cathol-
icism there is nothing so rotten, morally and
intellectually, as the support given by the Pro-
estant clergymen to the robbery and debauch-
ery of their parishioners by the modern quack.

The workings of the demagogic or sham re-
ligious conscience it is impossible for the medical
psychologist to trace. His own religion is nei-
ger gush, nor zealotry, nor humbug. It is
modest, real, and genuine. His simple reason-
ing is likely to be, that if these indorser-
get pay for their indorsements they are
the most purple gilled of sinners; if they do
not get pay, they are the most long-earred of
ass, because the proprietors are making huge fortunes by means of these, their most pliant and compliant tools.

The one lesson that stands forth with glaring clearness is, that the modest, sensible, and genuinely religious teachers and leaders of the Church would better quit for an hour the splitting of theologic hairs and turn their attention to their asinine associates, who, in striking hands with opera-bouffe medicine and Mephistophelian quackery, turn the stomachs not only of the medical profession, but of what that profession is both prophet and representative—the coming civilization of science and of common sense. Philadelphia Medical News.

Bedside Instruction in Hospitals.—Interest in the question of bedside instruction in hospitals has recently been vividly aroused in Philadelphia by a newspaper report that such instruction was to be hereafter prohibited at the Philadelphia Hospital. Inquiry into the facts shows, however, that this report is not correct. It is probably the intention of the Bureau of Charities and Correction, after due consultation with the medical staff of the Philadelphia Hospital, to formulate such wise regulations as may prevent the use of patients for bedside instruction in a legitimate manner by the unauthorized staff of the hospital from degenerating into an abuse of the patients by unauthorized persons.

Quite apart from local considerations, or the regulations that may or may not be enforced at any particular institution, the broad question as to how far the wards of hospitals should be utilized for teaching purposes is one that demands serious consideration. There can be no doubt that the primary purpose of a hospital is to care for the sick; but if, while carrying out this primary object of rendering service to suffering individuals, there can also be fulfilled the supremely important function of affording students of medicine the opportunity to become practically familiar with disease in its varied aspects, and to observe the effect of remedial measures, an additional service will be rendered to mankind at large.

All men are heir to the ills of flesh. All men at some period in their lives seek medical assistance. It is therefore to the interest of all men that those to whom they will apply for such assistance shall be qualified in the highest possible degree. Real qualification for the physician’s duties is not to be gained in the study, in the laboratory, or in the lecture-room. The man who can pass the most brilliant examination for his degree is not always the best physician. Theory must be married with practice. The instruction gained from books, from experiments, from the living word of the teacher as he explains principles, summarizes medical history, and relates his own rich experience, must be reinforced and made fruitful by actual contact with disease and with patients at the bedside. Either this fructifying contact of theory with practice must be gained under the direction and supervision of experienced teachers, upon whom shall rest the responsibility for the diagnosis of the cases and for measures adopted for the relief of the patients; or it will be gained only at the cost of much perplexity to the practitioner, and more or less suffering and risk to the patient, after the practically unqualified student enters upon the duties of his profession.

One reason why the country doctor, even if less richly cultured from a literary or scientific standpoint than his brother of the city, is often superior to the latter in the readiness with which he meets emergencies, and in the soundness of his judgment under trying circumstances, is that the country practitioner, as a rule, has been bred to practical medicine by constant association in the work of his preceptor.

It has long been a reproach to our American colleges that they would grant degrees to men who had come no nearer to a patient than might be necessary to look upon him from the benches of the clinical amphitheater. In Great Britain and on the Continent of Europe medical teaching has always been largely done in the hospitals, and the tendency to magnify the importance of such teaching and to increase the opportunities therefor that has recently developed in American schools is, from the standpoint of medical education, a most desirable step in advance. It is manifestly to the interest of the community to encourage this ten-
dency and to enlarge the facilities at the disposal of the colleges.

But the question has been asked, is it to the interest of the patients utilized for teaching purposes that they be handled by scores of inexperienced men, or that their rest be disturbed in order to exhibit them to students? Is it just to the poor man in a hospital to subject him to intrusions and disturbances from which the rich man is free?

These questions, however, would not be propounded by those who have watched the conscientious hospital teacher on his rounds. To those who have not had the opportunity for such observation it may be said that the attending physician bestows upon the patients entrusted to his care in hospitals the same thoughtful consideration as is extended to those otherwise situated under the most favorable worldly conditions. The very fact that a patient is to be utilized for demonstration insures an additional amount of care in thoroughness of observation, in accuracy of conclusion, and in application of therapeutic measures, so that the lesson taught may be truly and deeply impressed. The physician would be unworthy of his trust if, by reason of his zeal as a teacher, he interfered with the progress of his case, or in any way jeopardized its successful issue; and no man should be made a hospital physician unless he can be confidently depended upon to protect the interests of those entrusted to his care.—Philadelphia Medical News.

In Memory of Prof. T. G. Richardson, M. D.—The following resolutions were this day unanimously adopted by the faculty of the Medical Department, Tulane University, of Louisiana:

Whereas, Prof. T. G. Richardson, M. D., was called to New Orleans as a citizen by the Medical Department of the Tulane University of Louisiana, and continued his connection therewith from April 19, 1858, until severed by death, May 26, 1892, and having given to the Medical Department thirty-one years of active service, fourteen years as professor of anatomy, seventeen years as professor of surgery, and twenty of these years as dean; and having also given, during the last three years of retirement from active service, the most convincing proofs of his great devotion to the present and future welfare of the Medical Department,

Resolved, That Professor Richardson, endowed by nature with physical, mental, and moral superiority, was pre-eminently distinguished for his culture and skill as surgeon and physician, which gained for him national reputation and rendered him one of the most instructive and popular of medical teachers; for exceptional scientific attainments, which, while broadening his views of nature's God, left him none the less firm in his Christian faith; for his courage and patriotism in war and his benevolence and philanthropy in peace; for his moderation and wisdom in council, and for his zeal and ability in executive administration; for his inflexible devotion to truth, honor, and duty; for the strength of his friendships in adversity as in prosperity, and for the fidelity, tenderness, and devotion given to his beloved and honored wife.

Resolved, That by the death of this strong, wise, and good man the Medical Department has lost its most valued friend and counsellor; the medical profession, its most honored representative in New Orleans; the State of Louisiana, a citizen unsurpassed for patriotism and for worth; his friends, a heart to love and a hand to help them, and his wife and family one who has left precious memories of a loving, virtuous, and noble life.

Resolved, That at the next annual commencement, April 5, 1893, memorial addresses upon the life and services of Prof. T. G. Richardson, M. D., shall be delivered.

STANFORD E. CHAILLE, M. D.
NEW ORLEANS, LA., May 30, 1892.
Dean.

The State Societies.—Two years ago, when the Association met in Nashville, a resolution was offered which had for its purpose the adoption of such a by-law as might be necessary in order to effect a closer unification of the State Societies with the American Medical Association than now exists. Under the rules this went over for a year before action could be taken. Last year, when the subject came up in order, the President was directed to appoint a committee to formulate such a plan as might seem proper and practical. Through an oversight this committee was not appointed, but on account of this informality so important a subject as this should not be allowed to drop out of sight, but may very properly be presented at the ensuing meeting by Dr. N. S. Davis, who was the mover of the motion to appoint the committee.

It is exceedingly important that the State Societies should sustain a close and practical relationship with the American Medical Asso-
ciation by becoming branches of the central organization. This would be highly beneficial to the State Societies, which should in turn secure the organization of a society in every county, which would stimulate to good work and do very much in the way of elevating professional standards all over the country. Such local organizations would smooth personal asperities, and it would be soon seen that there is a greater community of interest in the ties that bind us together in a common profession than is generally supposed. The County Societies, being all alive and holding monthly meetings, would stimulate a universal interest in the State Societies. A membership in a local County Society should also mean a membership in the State Society. The papers and discussions in these local societies should find their way into print in the local medical journals. This would be a grand good thing for our literature, as it would at once interest every member in the local journal that publishes their proceedings. The universal taking of local journals would do much in the way of eradicating trade publications, which subsist wholly on their advertising patronage, and are only degrading and demoralizing in their influence.

In the organization of the State Societies the presidents should be ex officio vice-presidents of The American Medical Association, and the secretaries and treasurers hold similar relations. These officers, having the names of members and the machinery of the State Societies in their hands, could take the necessary steps to bring every member into actual permanent relationship with the American Medical Association.

This would place the Journal of the Association immediately in the hands of not less than twenty thousand practitioners, and which would very speedily be increased to double, treble, and quadruple that large number, and provide for the issue of a publication with the strength of a Hercules in power.

To bring this about, steps should be taken at this meeting to invite all affiliated and national specialty societies to become branches of the American Medical Association on such simple basis as that above indicated.—Journal American Medical Association.

Physicians do not write.—This is the general cry of those who desire to see them come to the front. As the California Medical Journal very justly observes, there seems to be a misconception, on the part of the profession in general, on the subject of writing for medical journals. The average practitioner seems to think that none but the editors of the journals or one who is a teacher in some medical college could or would write an article for the perusal and criticism of the general profession; nor lay down theories and laws to govern others. Poor indeed is the physician who dare not get out of the beaten paths, and may be, of his predecessors, be they his teachers in the college he has attended or the authors of his textbooks. Can he blindly follow any of these and be successful? No! Then, if he dare differ with them in his theories and practice, why not go on record as differing with his own confrères? This would be a slow world if we all believed and did the same. How did our teachers gain their present status of knowledge and success? Was it not by observance and experience of others? Can’t you do likewise? You have not only your teacher’s knowledge to build upon, but also that of their predecessors; hence your advantages are greater than those of many professors in our colleges, and you could teach them many wholesome lessons, that you have never been taught, but learned by experience, in general practice. Hence you do yourselves and the progress of medical science an injustice in not contributing to the literature of the profession. Medical Review.

The second annual meeting of the American Electro-therapeutic Association will be held in New York, October 4, 5, and 6, 1892, at the New York Academy of Medicine, 17 West Forty-third Street.

New Chairs and Professors at the Jefferson Medical College.—The Board of Trustees of the Jefferson Medical College at their meeting, April 7, 1892, instituted a chair of Clinical Gynecology, with a seat in the Faculty, and elected to the new Chair, Dr. E. E. Montgomery, who has been for a number of years Pro-
fessor of Gynecology in the Medico-Chirurgical College. They also established the following Clinical Professors, electing Dr. F. X. Der
cum, Professor of Nervous Diseases; Dr. E. E.
Graham, Professor of Children's Diseases; Dr.
H. Augustus Wilson, Professor of Orthopedic
Surgery; Dr. H. W. Stelwagon, Professor of
Dermatology, and Dr. W. M. L. Coplin, Ad
junct Professor of Hygiene.

Army and Navy Medical Intelligence.

Official List of Changes in the Stations and
Duties of Officers serving in the Medical Depart-
ment, United States Army, from April 3, 1892, to
May 14, 1892.

First Lieut. William F. Peavance, assistant sur-
geon, U. S. Army (recently appointed), will proceed
from Rossville, Illinois, to Fort Riley, Kansas, and
report for duty at that station.

First Lieut. Mervin W. Ireland, assistant surgeon,
U. S. Army, ordered to Fort Gates, N. D., for tempo-
rary duty, during the absence of Captain Alonzo R.
Chapin, assistant surgeon, U. S. Army, on sick leave.

Major Albert Hartsuff, surgeon, U. S. Army, granted
leave of absence for 6 months, to take effect on or
about July 10, 1892, with permission to go beyond
the sea, and to apply for an extension of two months.

First Lieut. Alfred E. Bradley, assistant surgeon,
U. S. Army, ordered to Columbus Barracks, Ohio, for
temporary duty at that station, during the illness of
Captain Augustus A. De Loffre, assistant surgeon,
U. S. Army.

First Lieut. Henry D. Snyder, assistant surgeon,
U. S. Army, granted leave of absence for one month
and fifteen days, to take effect when his services can
be spared by his post commander.

Captain Ben. Mandley, assistant surgeon, U. S.
Army, is granted an extension of one month to leave
of absence granted in S. O. 40 Dept. Dak. March 19,
1892, S. O. 98 A. G. O., April 26, 1892.

The resignation of First Lieut. William N. Suter,
assistant surgeon, U. S. Army, has been accepted by
the President, to take effect July 28, 1892.

Leave of absence for six months, on surgeon's
certificate of disability with permission to leave the
Department of Texas, is granted Colonel Joseph C.
Bailey, surgeon, U. S. Army.

First Lieut. William E. Purvis, assistant sur-
geon, U. S. Army, is relieved from duty at Fort
Riley, Kansas, and will report in person to the com-
manding officer, Jefferson Barracks, Mo., for duty at
that post.

First Lieut. Francis A. Winter, assistant surgeon,
U. S. Army, is relieved from duty at Jefferson Bar-
racks, Mo., and will report in person to the com-
manding officer, Fort Riley, Kansas, for duty at that post.

Major David L. Huntington, surgeon, U. S. Army,
is relieved from duty in New York City, to take ef-
fect of the final adjournment of the Army Medical
Board, and will then proceed to Los Angeles, Cal., and
report in person to the Commanding General
Department of Arizona for duty, as Medical Director
of that department, relieving Colonel Joseph R.
Smith, surgeon.

Colonel Smith, on being relieved by Major Hunt-
ington, will proceed to San Francisco, Cal., and report
in person to Commanding General, Department of
California, for duty as Medical Director of that
department.

First Lieut. William F. Lippitt, jr., assistant sur-
geon, U. S. Army, upon being relieved from duty at
Fort McPherson, Ga., will report in person to the
commanding officer, Camp Eagle Pass, Texas, for duty
at that post, relieving First Lieut. Ogden Rofferty,
assistant surgeon, U. S. Army.

First Lieut. Ogden Rofferty, in being relieved by
First Lieut. Lippitt, jr., will report in person to the
commanding officer, Alcatraz Island, Cal., for duty
at that post.

SPECIAL NOTICES.

"Robinson's Lime Juice and Pepsin" is an excel-
 lent remedy in the gastric derangements particularly
prevailing at this season. It is superior as a digestive
agent to many other similar goods. (See this issue.)
See remarks on their Arom. Fluid Pepsin also.

The attention of our readers is called to the new
advertisement of Reed & Carrick.

This firm have spared neither labor or expense to
perfect their Infant Foods in keeping qualities by
sterilization and by placing them in hermetically
sealed containers. They claim that Lacto-prepara-
atu, an all-Milk Food, for young infants, and Carrick's
Food, composed of half Lacto-Preparata and half
dextrinized wheat, for use after six months of age,
have now practically reached perfection in keeping
qualities, and that they are the only Infant Foods in
the market that will alone thoroughly nourish a child
during the nursing period. Their Lacto-Preparata
almost perfectly resembles human milk in character,
composition, and taste.

The preparations of "Pepsin," made by Robinson-
Pettet Co., are endorsed by many prominent physi-
cians. We recommend a careful perusal of the adver-
tisement of this well-known manufacturing house.
(See this journal.)

Have used Peacock's Bromides for some time in
my practice, and I would not like to be without it;
in fact, I do not know of any thing that would take
its place in nervous conditions.

J. T. Kilburn, M. D.

Trafton, Mich.

Andrew Boyd, M. D., Vice-President of the Tri-
State Medical Association, Scottsboro, Ala., says: It
gives me pleasure to say that for two years I have
prescribed S. H. Kennedy's Extract of Pinus Cana-
densis, both alone and in combination, in many acute
and subacute inflammations of the mucous mem-
bane. As a disinfectant and astringent I do not
know its superior. It forms the base of my pre-
scriptions for phlyctenular pharyngitis used as a spray.
It has been used undiluted in ulcerated sore throat and
ulcers of rectum. I use it daily almost in common
sore throat, diluted with aqua cathartic. It has given
me good results, and I am very glad you have given
us a preparation we can rely upon.

Nervousness of Children—

Celerina ........................................ 3 oz.
Syr. Simp........................................ 4 oz.
M. Sig: Teaspoonful before supper and at bed-
time.
Original Articles.

CLINICAL OBSERVATIONS ON EPIDEMIC INFLUENZA.

By John A. Ouchterlony, A. M., M. D., LL. D.
Professor of Principles and Practice of Medicine and Clinical Medicine, University of Louisville.

Epidemics of influenza have occurred from time to time before that which has so extensively prevailed all over our continent during the last two years. The literature to which they have given birth appears quite meager in comparison with that following upon this the most recent invasion of the epidemic.

The journals have teemed with articles on specific influenza, and articles still continue to appear embodying the observations and views of physicians in different parts of the country. Yet there seems to be much to learn concerning this disease, which can be accomplished only by the recording of individual experience.

Actuated by this conviction, I venture to present to this Society the results of my own labors in the study and treatment of epidemic influenza.

Cases were first observed here early in the year 1890, and continued to appear until the end of winter, when the disease gradually disappeared. With the advent of cold weather in the autumn it returned, and the winter of 1891 witnessed a repetition of the experiences of the year before. On the close of winter the cases of influenza again began to abate as be-

*Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Association. For discussion see p. 402.

fore, but the advent of the present year brought in its train the unwelcome guest which had visited us the two preceding winters.

In point of severity and prevalence the winter just past stands first, the winter of 1890 next, and the winter of 1891 last. It is the epidemic of these three winters that constitutes the material upon which my paper is based.

The disease, though protean in its manifestations in different individuals, was nevertheless characterized by a clinical history and grouping of symptoms strongly suggestive of etiological identity.

Period of Incubation. As in other infectious diseases there was doubtless a period of incubation, but owing to the general susceptibility and prevalence it was almost impossible to determine precisely when infection took place, and also the duration of the period of incubation. My impression is, however, that it was in many instances extremely brief. At times the disease appeared almost immediately after exposure, leaving no time for an incubation process.

Varieties. The classification of epidemic influenza into a catarrhal gastric and nervous form of the disease, according to the prominence of symptoms referable to the respiratory, digestive, or nervous systems, was not generally practicable.

The symptoms were frequently irregularly grouped. In a large number of cases intense muscular pains throughout the whole body was a predominant feature, and I am inclined to think this would justify the addition of another variety that might be designated as the muscular form of influenza.

Catarrhal symptoms were far less common and much less marked than the name of the disease seems to indicate. In many cases they were entirely absent.
Digestive disturbances of some kind were certainly always present, but rarely in such a degree as to justify a distinct grouping on their account. Severe stomatitis, intense gastric irritability, profuse diarrhea, sanguineous intestinal discharges were in no instance observed by me in this epidemic.

Some observers have described what they called "Influenza Fulminans." If the term be intended to designate merely a great suddenness of onset, then certainly this variety has been met with here; but if it is meant to convey by this name a form of influenza which by its malignancy overwhelms the organism and causes it speedily to succumb, as in typhus fulminans, I was fortunate enough never to have encountered it.

Symptoms. Great differences between individual cases were observed in this respect, both as to the presence of individual symptoms and as to their grouping.

In a considerable proportion of cases there were prodromata, lasting from one to several days, and consisting mainly in languor and lassitude, a sense of general malaise, with more or less marked impairment of appetite. Now and then a feeling of great fatigue was complained of, for which there was no apparent cause. Flashes of heat alternating with chilliness, and even slight and transient rigor, also occurred at times at this stage. Headache and wandering pains in different parts of the body were not seldom present.

A well-defined chill of greater or less violence, accompanied by rise in temperature and strongly suggestive of a malarial paroxysm, ushered in the disease in some instances.

In others a sudden feeling of illness without any premonition would take possession of the patient, and with this came often a conviction or apprehension of impending danger for which the character of the symptoms did not account. The chill was sometimes repeated more than once in the same attack.

Coryza was only rarely observed in my cases, but catarrhal pharyngitis and more or less extensive bronchial catarrh were among the most commonly noted of the early symptoms.

In point of frequency the bronchial catarrh was second only to the migratory muscular pains, which figured very conspicuously in the cases observed by me.

Whatever the mode of access, whether sudden or gradual, whatever organs bore the brunt of the attack at the start, there was always fever. The suddenness and extent of the temperature excursion was almost always in proportion to the severity of the attack. The type of febrile disturbance was, as a rule, remittent, with the exacerbation toward night. In most instances the fastigium was reached in from twenty-four to forty-eight hours. Its duration was determined by the intensity of the infection and by the presence and nature of complications. Defervescence rarely took place by crisis, although at times I have seen a sudden fall in temperature accompanied by more or less profuse sweating. Often enough a tendency to sweating was well marked throughout and had not the effect of lowering the temperature. It seemed rather to be an evidence of general relaxation.

In general the fever terminated by lysis, and in severe attacks the return to normal temperature was a slow process that required several days for its completion.

In mild cases the temperature reached only 101° or 102°, while in severe attacks it rose to 104° or even 105°.

It was not uncommon to find that patients whose hands felt rather cool, and in whom but little fever was anticipated for this reason would, when tested thermometrically, give a temperature of 104° and over.

When in the course of the disease a complication arose, this would generally be indicated by a commensurate rise in temperature, but it also happened at times that even after the temperature had begun to fall there would be repeated exacerbations without any complication to account for it. Such occasional relighting of the fever also occurred after the norm had been reached.

In some cases the fever continued for several weeks, this persistence being explained only by the persistence of the toxæmia.
The muscular pains to which reference has already been made were always present, at least I can not recall a single case treated by me in which this symptom did not form an integral part in the semiological picture. It goes without saying that they varied greatly in severity and duration. In some they constituted one of the earliest symptoms, and abated with the progress of the disease either spontaneously or as a result of treatment; in others they continued throughout the whole course of the attack, and their cessation marked the advent of convalescence. In a third group these pains were not only the principal complaint, but entailed such intense suffering as to be absolutely unbearable.

They were usually migratory, shifting from place to place, now attacking one extremity, then another, or seizing upon one group of muscles after another in more or less rapid succession.

It was not uncommon to hear a patient complain of sore throat, when the most careful examination failed to reveal any local lesion whatever, the soreness, or, rather, pain, being entirely muscular. In the same way the muscular muscles, or the muscles of respiration, would in some cases be affected.

In exceptional cases, when these muscular pains were very severe and persistent, there would be but slight temperature disturbance.

In this connection it may not be out of place to mention the occasional occurrence of oppression or distress referred to the chest, even when neither pulmonary or enteric complications were present. It was probably either of purely nervous origin or due to implication of the thoracic muscles.

The most striking symptom, besides fever and muscular pains, was undoubtedly the sense of weakness and exhaustion which was present in every well-developed case of influenza. It declared itself early, increased with the progress of the attack, was generally out of all proportion to the fever and other symptoms, and often remained long after all other manifestations of the disease had completely disappeared.

This general debility was in individual instances associated with complaints of more marked weakness in the upper extremities, so that the patient felt as if he could hardly lift his hands, or a sense of weight in the lower extremities, with difficulty in raising the feet from the ground, or, again, he felt almost "too weak to breathe."

In severe cases the organs of circulation underwent profound modifications, and even when the morbid process was of less intensity there would always be a certain degree of circulatory disturbance.

The pulse was always more or less accelerated, a certain correspondence between it and the degree of fever being observed. It was often small, weak, and compressible, even at an early stage. The first sound of the heart soon became short, like the second, and purely valvular.

With the progress of the disease, even when uncomplicated, and especially when complications arose, the frequency of the pulse increased, so that a rate of 120 per minute was common. It did not, as a rule, fall pari passu with the temperature as defervescence occurred, but remained abnormally weak and rapid for a protracted and indefinite period.

Among the disturbances of the nervous system incidental to epidemic influenza cephalalgia has already been mentioned. It was sometimes persistent, while it ordinarily was limited to the initial stage.

Delerium was rare, especially in uncomplicated cases, somnolency equally so; insomnia was more frequently observed. Excessive and quite troublesome restlessness was an occasional symptom, and really distressing.

The Digestive Organs, though necessarily involved in this morbid process which invaded all other parts of the economy, appeared to be implicated in a comparatively mild degree. Anorexia, a coated tongue, occasionally nausea, moderate constipation or relaxation of the bowels, sometimes cramps, were the only symptoms that attracted my attention. Sore throat and even painful deglutition, though sometimes complained of, were generally dependent upon either a catarrhal pharyngitis, or still more frequently it was simply a painful condition of
the muscular structure of the parts involved, like that of the muscles elsewhere.

The urine was scanty and high colored, but save in cases of complicating nephritis, presented no evidence of renal disturbance.

Duration. The duration of the disease was extremely variable, and it has been very difficult, if not impossible, to form a correct estimate on this point. The reasons were manifold. Many patients did not summon a physician until after they had been ill for some time, and it was no uncommon thing to find that they were unable to designate the initial day of their illness.

The absence of any striking symptom ushering in or marking the arrest of the malady was often the principal obstacle. It must also be borne in mind that severe complications not seldom protracted the case far beyond the duration of the primary disease without any line of demarkation between it and the secondary lesion.

Instances where the disease seemed to be abortive were not wanting. Sometimes it was very mild, so that in the course of a few days the patient was sufficiently restored to return to his ordinary avocations.

The interval between accession of fever and deservescence with marked subsidence of leading symptoms has seemed to me to constitute the actual duration of the disease, even though somewhat lasting debility or other abnormal conditions extended the period of convalescence sometimes even indefinitely.

Guided by this rule the average duration of my uncomplicated cases was from seven to ten days. The course of the disease was generally more brief in children, and in persons past middle age it was usually more prolonged, besides being more subject to complications in the latter class.

Convalescence. In a certain number this was soon established and was complete, but in a large proportion it was tardy, and the patient continued for weeks, even for months, in a state of weakness and exhaustion altogether out of proportion to the severity of the attack. This profound and protracted devitalization of the whole organism I found to be one of the most characteristic features of the disease.

After a comparatively short and not remarkably severe attack the patient would be found, perhaps three or four months later, complaining of decided diminution of strength, of a feeling of great fatigue after even slight exertion, indisposition to either bodily or mental exercise, backache, headache, soreness, and even pain in the muscles, the pulse more or less rapid but accelerated by even slight emotion or exertion, weak, compressible—the first sound of the heart short and valvular, temper irritable, sleep insufficient and disturbed, sometimes depression of spirits, even melancholia, in persons naturally of cheerful disposition; and yet the appetite often enough remained good, digestion and assimilation unimpaired, and without any indication of anemia.

Careful investigation establishing entire absence of any local disease, the only conclusion that could be drawn was that the preceding infectious disease by its subtle action had produced a profound and persistent depression of the nerve centers.

Immunity. Unlike other infectious diseases, one attack of epidemic influenza does not confer immunity against subsequent attacks. A recurrence of the disease in the same individual was witnessed by me in a considerable number of instances, not only in successive years, but even after an interval of but a few weeks. It must, however, be admitted that in these cases the first attack had invariably been mild and uncomplicated, and the convalescence speedy and complete.

Relapses, by which one must understand a return of the original disease before or immediately after it had entirely run its course, never occurred. When such an event was said to have occurred it invariably happened that some complication or sequel had developed.

Complications. The tendency of epidemic influenza to localize upon the respiratory mucous membrane is so constant and strong that bronchitis must be regarded as rather a symptom than a complication, and one looks for it as a part of the morbid process just as one looks for the bronchial catarrh in measles or the intestinal lesion in typhoid fever.
It is also interesting to note in this connection that it was in the characteristic purulent exudate upon the bronchial mucous membrane that Dr. Pfeiffer found the bacillus which is generally considered as the morbillous agent of the disease.

When the bronchial catarrh becomes very extensive, and especially when it invades the capillary tubes, it becomes a complication of considerable importance. Extensive bronchitis occurred frequently, in my cases the capillary variety only twice.

The border line between this affection and catarrhal pneumonia is a very narrow one and is readily passed. The latter was of rather frequent occurrence in the attacks of more severe type. In my own experience the most dangerous complication was croupous pneumonia. It was present in all the cases which terminated fatally. Out of nine cases four died—two of the fatal cases were males and two females; two had double pneumonia; all four were over fifty years of age, the oldest was over seventy. In the majority of the patients with pneumonia, the latter commenced as an ordinary bronchitis, the croupous exudation coming on later. In one case symptoms of acute pleurisy followed upon a well-marked coryza, and consolidation supervened last of all. The other complications were as follows: Delirium, 2; pleurisy, 4; pseudo-membranous tracheitis, 1; endocarditis, 2; pericarditis, 1; thrombosis, 1; nephritis, 2; parenchymatous tonsillitis, 2.

Very numerous sequelae have been mentioned by other observers, but so far comparatively few have come under my notice. The first and most important of these has been cardiac asthenia, characterized by a feeble and short systole, increased frequency, and irregularity of the heart's action, palpitation induced by even moderate exertion and sometimes edema of the feet. In these cases there was no valvular lesion, but in some the organ was enlarged. Well-marked mitral insufficiency developed in two cases. Chronic nephritis was observed in two cases. Persistent rheumatoid articular affections were noted in several instances. In some cases menstruation, previously normal, became more prolonged and profuse. Insomnia and marked depression of spirits followed in a few cases, and neuralgia of various nerve trunks occasionally ensued.

Effect upon Other Diseases. In some persons an attack of influenza seemed to engender a strong receptivity or susceptibility to tuberculosis, and where this disease pre-existed its course was unfavorably influenced by the epidemic infection. Emphysema and Bright's disease were also aggravated by influenza, and syphilis was found to be a soil in which the influenza bacillus flourished, but the patient did the reverse.

Prognosis. Where no organic disease is already present and no grave complication sets in during the course of the influenza, the prognosis is, as a rule, favorable. I lost patients only when pneumonia set in, but even then not always, for some of the most severe cases of pneumonia supervening upon influenza in old patients got well.

Treatment. It must be borne in mind, in the first place, that epidemic influenza is an acute infectious disease; and, in the second place, that like others of this class it runs a self-limited course. In the third place that, as no specific against it has yet been discovered, the duty of the physician with regard to it is analogous to that of the pilot; he can not quell the storm, but by the exercise of knowledge and skill he may guide his vessel safely through it.

I found it often of advantage to begin treatment with a mild purgative, calomel or sprudel salts being those usually employed. When the muscular pains were extremely severe, hypodermic injections of morphine were administered. Ordinarily phenacetin proved efficacious in controlling this symptom. Salol was the agent relied on with a view to moderating the fever, but as it also appeared to favorably influence the pains, it was prescribed in the majority of cases throughout the whole attack, the usual dose being from five to ten grains every two or three hours. The combination of salol and phenacetin in equal parts often proved especially beneficial. Quinine was generally given when the febrile movement assumed an intermittent type and simulated more or less closely
a malarial affection. Alcohol was found of signal benefit, and its regular and continued administration was a leading feature of the treatment.

When cough was particularly distressing inhalations by means of the eaux kettle or steam atomizer gave relief, and the addition of com. tr. benzoin to the water rendered the steam more efficacious. Rest in bed throughout the whole course of the disease I regard as an important part of the treatment. In severe cases it is unnecessary to insist on this point, but when the attack was but moderately severe or mild, the patient was often tempted to leave the bed and sick-chamber too early. The best rule in the management of epidemic influenza is to "make haste slowly."

I am sure that by observance of this simple precaution complications may be warded off and convalescence hastened, while much evil has resulted from neglect of it. Maintaining a uniformly warm temperature of the sick-room is another simple rule, the importance of which I have often had reason to appreciate. In a disease exhibiting so strongly as this a tendency to exhaustion, the necessity of keeping up the patient's strength by concentrated and easily digested and assimilable food can not be overrated. During convalescence quinine was found far more efficacious as a tonic than it was as an antipyretic during the attack. To combat the atony of the whole muscular system, even that of the heart, I know of nothing equal to strychnia in full doses and persisted in for a considerable time.

In conclusion, I must point out that influenza seems to expend its virulence more upon the nervous system than upon the blood. Hence it is that in those suffering severely from exhaustion and other sequelae of this disease, the blood seems to have deteriorated but little. For this reason we ought to address our efforts to tone up the nervous system rather than administering hematics. And better results were obtained from the use of strychnia, arsenic, and phosphorus than from iron. The use of the latter no doubt has its legitimate place, but is not always needed, nor is it alone sufficient to repair the ravages of this disease. In the extreme cardiac asthenia that was sometimes observed, I have had good results from strophanthine, and the best results when it and strychnia were given together.

LOUISVILLE.

CARDIAC MECHANISM.*

BY EWING MARSHALL, M. D.

Assistant to the Chair of Materia Medica and Practice of Medicine, Medical Department University of Louisville.

It is my purpose, under the heading of Cardiac Mechanism, to discuss the following subjects:

The Causes of Circulation; A Complete Heart Action; Causes of Apex Beat; To Demonstrate the Relation between the Heart's Action and the Curves obtained by Endocardiac Pressure.

The causes of circulation laid down by physiologists generally are as follows:

Valves of the veins; action of the skeletal muscles; suction power exerted by the thorax when distended; ventricular systole.

By muscular contraction the blood is pressed out of them, and as their veins are supplied with valves it can not go toward the capillaries, and therefore moves onward toward the heart. The muscles actively and the valves passively assist in the circulation, but they can not assist in the movement of the venous blood through the veins unsupplied with either valves or skeletal muscles, and, again, the muscles can not assist when they are inactive, and yet circulation continues through that very tissue.

The suction power exerted by the distended thorax plays an important part, but I question about its being as important as commonly accredited, and my doubts are based on the following reasons:

1. The heart acts four times while the lungs are acting but once.
2. Circulation continues temporarily even when respiration has stopped.
3. When the thorax is opened for the purpose of examining the heart in a living, warm-blooded animal, if artificial respiration is kept up the heart will continue to act for some time,

*Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Association, May, 1892. See p. 405.
yet, of course, there is no suction power due to a distended thorax present at such a time.

The power exerted by the contracting ventricle all are agreed is the prime power, but I question the ability of the left ventricle to force the blood to the extremities through the capillaries back to the right auricle.

The general scheme used to demonstrate this is faulty in an important point. It is considered that all the tubing enters into the scheme after the force-pump has been acting for some time and become filled with fluid, so that as much fluid as enters at the proximal ends with each stroke of the piston is discharged at the distal end; but that will not hold good in the vascular system, for all the vessels are by no means filled at any one instant. All the blood in the body probably could be stored in the abdominal vessels and yet not distend them.

If the forces so far accounted for were the only ones, I believe the blood would sooner or later collect in the veins, but there is a force unnoticed by all the physiologists within my reach, with the exception of Dr. Foster, and though he calls attention to it, yet he does not introduce it in his summary of the causes of circulation.

At the close of ventricular systole the muscle relaxes, and by its relaxing a negative pressure or so-called vacuum is produced, just as you see in a household syringe, when you compress the bulb you force the fluid out of it, and when you relieve it of the pressure it distends and fresh fluid is drawn into it; therefore I urge this suction power of the cardiac cavities as deserving of much more attention than it has received.

A complete heart action, or cycle as it is commonly called, being a continuous one, we have to select some point to begin with, and by common consent the close of the ventricular systole is taken.

While the ventricle is contracting the auricle has relaxed and the blood has been drawn into it, so that when the ventricular systole is over and its relaxation occurs, producing the vacuum in its cavity, the blood pours in from the auricle until the resistance exerted by the ventricular wall equals the force of the onward flow; then the auricle fills until the resistance of its walls equals the power of the onward flow. Now the blood is backed upon the great veins, and as their walls are weaker than either ventricle or auricle they are distended, and this distension is really the starting point of systole, for these vessels are supplied with muscular fibers similar to those found in the heart. Now they, being distended, act according to the function of muscular tissue, and by their contraction add the additional power necessary to distend the auricle, and it then responds to the irritation of distension and sends the necessary additional force to distend the ventricle and it then contracts, the auriculo-ventricular orifices are closed and the blood is forced into the great arteries.

The causes of the apex beat given by the different physiologists I have consulted are as follows:

Foster credits it chiefly to the sudden growing tense and hard of the ventricle during its systole.

Dalton, To the lateral swelling of the circular fibers protruding the apex.

Chapman: Sudden distension of vessels at the base; recoil of the ventricles as they discharge their contents, and the muscular fibers tilting up the apex.

Flett says the impulse is due to the locomotion of the ventricles, and in another paragraph says the locomotion is due to the sudden distension of the great vessels.

I do not feel that it would be wise to prolong this paper by discussing the effects of these different theories, so I will make haste and state how I think it is chiefly produced. Perhaps I may make myself better understood by recalling a little anatomy.

The wall of the right ventricle differs, as is known, from the wall of the left ventricle in three ways:

1. The left ventricular wall is about three times as thick as the right, and extends about one half inch below it.

2. The circular fibers appearing in such quantity in the wall of the left ventricle are almost absent from the right.

3. The left ventricular wall is thickest midway between auriculo-ventricular orifice and apex, and then shades off in thickness to the apex,
which is only two thirds as thick as the central band like condition, while the right ventricular wall is thickest close to the auriculo-ventricular orifice, and shades off slightly to the apex.

A theory of Dr. D. T. Smith's about the action of the uterus made me study the effect this massing of the fibers in a girdle, as it were, around the heart would have.

Now, the systole begins above and travels like a wave from the great veins to the apex, but, mark you, the apex is the last to act. When ventricular systole begins the blood is forced toward the inactive apex, and this strong girdle of circular fibers in the left ventricle crowds down the volume of fluid and resists any distension at that point. For three reasons I believe a bulging occurs at this time due to this hydrostatic pressure:

1. Muscle active above and inactive below.
2. The strong center resists distension.
3. The weak, inactive apex protrudes before the pressure.

As soon as the power in the ventricle is sufficient to overcome the resistance in the great arteries the blood rushes out and the heart becomes shorter, due to the contraction of the longitudinal fibers.

All observers agree upon the appearance of a temporary protrusion of the apex of the heart when observed in the open thorax; but in the face of Ericson's demonstration of laying an excised heart on the table and seeing it contract, they try to explain away what they call the apparent elongation, but I think they have overlooked the fact that the presence of fluid in the contracting heart would alter somewhat its real action.

Lastly, I wish to demonstrate, if I can, the relation between the parts of a heart rhythm and curves obtained by endocardiac pressure. If you will observe the diagram (copied from a plate in Foster's work), I will attempt to make my ideas manifest.

It is scarcely necessary to mention that the commonly accepted idea of a heart cycle is systole, or action followed by diastole or rest, while I wish to show that it consists of three parts, systole, diastole, and rest. At the point a in our drawing we find the negative pressure or vacuum in the ventricles and the blood is drawn in from the auricles, and the force of the incoming blood raises the pressure to b; there it continues until auricular systole occurs, marked in the figure by c. Auricular systole causes an increase in the ventricular pressure, evidenced by the upward stroke beginning at c. This increase in pressure is continued upward by the ventricular systole, which follows immediately upon the auricular systole with no appreciable interval between the close of the one and the beginning of the other. The pressure in the ventricle steadily increases until it is great enough to overcome the resistance in the great arteries.

![Curves of Endocardiac Pressure from Left Ventricle of Dog]

A a quickly beating heart, B a more slowly beating heart.

As soon as that is reached, represented by d in the drawing, the blood rushes out of the ventricle and there is a slight fall in pressure; but the ventricle quickly catches its lost grip and maintains the pressure (represented by letter e) until all the blood is expelled from its cavity, when it relaxes and its walls fall apart, assisted by the backward rotation of the heart and the distension of the coronary arteries, and then a new cycle begins.

If you will compare the two curves you will see how this explanation is borne out by them.
If the heart is beating rapidly, rest is short, demonstrated by the upper curve a. If the heart is beating slowly the rest is prolonged. Now the curve, which I venture to call the diastolic curve, is the one which Dr. Foster says he is unable to explain. He says others have tried to explain it on the theory that it was due to the auricular systole, but that in the slow-acting heart it is too far from the ventricular systole.

It appears to me perfectly satisfactory when we explain it as due to the pressure exerted by the blood drawn in by the ventricular relaxation, which thus exerts an active force in the circulation and accounts for that part of the cardiographic curve that has hitherto been unexplained.

Louisville.

CLINICAL BACTERIOLOGY.*

BY LOUIS FRANK, M.D.,
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The study of bacteriology has aroused interest in layman as well as doctor since Koch's discovery of the tubercle bacillus in 1882. No study has made such rapid strides, cleared up so many points, or given cause for so much thought as this most scientific branch of medicine.

The advances made by the surgeon, the great principles of antisepsis and asepsis, depend upon bacteriological research. It is not only to the surgeon that this work has been beneficial, but also to the clinician, to whom the subject is an especially important one, assisting materially in his diagnosis, being sometimes the only absolute means, as well as in his treatment and in his prognosis.

To understand clinical bacteriology does not necessitate that one be a thoroughly versed bacteriologist, no more than it is necessary that he should be a pathologist to make microscopic urinalysis. It is necessary, though, that he be versed in technique and know how to handle the microscope.

This is a day of microbes, and I hope the time will soon come, for come it must, when by our knowledge of micro-organisms we will be able to combat disease, and when that time does come we will have the day of preventive medicine. Even now we have text books of bacteriological diagnosis, which shows the rapidly growing importance of the subject. It is necessary in this progressive age of ours that one must know clinical bacteriology to be abreast the times, to practice intelligently, giving the patient the benefit by making early and correct diagnosis, and meeting the real therapeutical indications. We are not working on theories, but dealing with absolute facts.

Take, for instance, that dread disease, tuberculosis, the scourge of every nation and the cause of one seventh of all deaths. The relation of the bacillus to the disease as a causative factor is now established and is a point requiring no argument or discussion. Even the very few who doubt it would be unwilling to allow themselves to be inoculated with a culture of the bacillus.

What can be more gratifying than to make an early diagnosis in this disease? How much we may gain by so doing, and not waiting until destruction is beginning and consumption written on every line of the face! At this late stage nothing can be done, whereas by early diagnosis we are able to hold out some promise and can improve our patients by surrounding them by the proper atmospheric conditions, giving them proper diet, etc.

You all know how difficult it is to diagnose thus early by the physical signs, for there are many things to be differentiated. In fact, it is a bronchitis that we met with in the earliest stage of the disease. Can we positively say this is a tubercular bronchitis? Yes; but only by examination of the sputum. The microscope is the judge, and if the evidence shows the presence of the tubercle bacillus, there is no appealing the case.

Even cavities are not such easy things to diagnose physically, for we might have the same physical signs from bronchiactasis with peri-bronchitis. It is an absolute impossibility to diagnose some of these cases by our usual means. The bacteriologist will tell you, though, that he can in a few minutes say whether the patient positively has tuberculosis. The examination requires but a short time, is simple,
the method can be practiced without any great outlay for apparatus, and can be learned by any one in a few hours. The methods for staining the organisms are various, but I prefer the method given by Günther, as experience has taught me it is the best and most rapid, the staining process being completed in less than five minutes.

Malaria, that common every-day malaria which we all know, occasionally causes us trouble, and in these we have another example of the practical importance of our bacteriology. Can you in the beginning always diagnose typhoid fever? In most of the cases we can only do so by the therapeutic test, it being always a question between typhoid and malaria. There is another way, though, and by its application we are sure of our diagnosis at once. This latter symptom, a pathognomonic one, is the recurrence of the specific parasite in the blood.

Lavaran, in 1882, described peculiar structures occurring in the blood of those sick of malaria, which were later studied most accurately by Marchiafàra and Celli, who found them constantly in the blood of the malarial person and always absent in those not having the disease. Marchiafàra and Celli gave the name of plasmodium malarium.

Dock, then of Galveston, examined the blood of seventy-six patients and found in forty-one cases the bodies above spoken of. In thirty-five cases, including dysentery, influenza, etc., also in four cases of enteric fever, two of which had been diagnosed malaria (one of the latter dying), he was able by the examination of the blood to exclude malaria, the subsequent cause of the cases confirming his exclusion. He further says, "A number of cases were encountered which the blood examination showed to be malaria, but in which the diagnosis would not have been made without it or the verdict of time and the therapeutic test." (Medical News, 30 [v.], 91.)

Lavaran, Celli, Crookshank, and Henuppean agree that these plasmodia are the cause of the disease. (Lancet, 15 [vii.], 91.)

James found in 400 cases, as the constant type of protozoa, the specific one of malaria. (Hygienische Rundschau, 15 [vii.], 91.)

Hertel and Van Noorden were able to make a negative diagnosis in a case of beginning tuberculosis by the absence of the plasmodium malarie, the further course of the disease proving that their diagnosis was correct. (Berliner Klinische Wochenschrift, vol. 12.)

Toulmin (Medical News, 19 [viii.], 91) reports three cases in which he says it would have been impossible to make a differential diagnosis at the time between malaria and typhoid, except by the examination of the blood for the parasite or by the therapeutic test. In another case he says that for the diagnosis it would have required more time, apparatus, and trouble than required for the blood examination.

From a large number of cases he comes to the following conclusions, that

"There are cases in which from the history, symptoms, and signs we can not differentiate between malarial fever and certain other diseases.

"In examining the blood of these cases for the presence or absence of Lavaran's organism we have a means of diagnosis at once accurate, practical, and practicable.

"These cases are rare in which the organisms, though present, can not be found, and they do not exist at all if the examinations are careful and the examiner has had experience."

To this I would add that the examination of a patient with fever and no diagnosis, or an uncertain one as to its cause, is not complete unless an examination of the blood has been properly made.

If we are able to so easily diagnose the disease, why should we not employ this method and cease giving quinine in every case of fever when we are uncertain as to its cause? the latter manner of making a diagnosis being, to say the least, very unscientific.

As to the prognostic value of clinical bacteriology, I will mention a case:

In December last I delivered Mrs. X., primipara, of a healthy child. Labor normal. Two days after delivery I was asked to look at the child's eyes. Finding a very bad case of ophthalmia, I called in Dr. Dabney, who ordered nitrate of silver locally. In speaking of the case several days later, the doctor expressed
the opinion that this was a gonorrheal ophthalmia, and suggested that I make a bacteriological examination, which I did on the tenth day after the discharge began and after daily use of the silver. Still I was able at this late day to find, in specimens stained with eserine and methyl blue, the characteristic diploccoci of Neisser. In this case the prognosis was made by me at most from the microscopic examination. The father of the child gave a history of gonorrhea previous to marriage, but said he had no discharge when married, nor has he had since. The mother gave no suspicious history, and I was not able to examine the vaginal secretions. I am watching though for the development probably of some tubal trouble, as an infection had undoubtedly taken place and still exists.

I have taken up in this short paper only those diseases where the examination can be easily made, and without the necessary apparatus for cultivation of organisms as required for examinations in diphtheria and other diseases of microbic origin, but I sincerely hope the time will come when every doctor will make bacteriological examinations for their clinical value. I am also glad to see that the medical schools of Louisville are abreast the times and are teaching the doctors that are to be this most important subject.

Louisville.

DIABETES MELLITUS.

BY J. O. JENKINS, M. D.

Diabetes mellitus or glycosuria is a more or less chronic disease, characterized by a marked increase in the daily amount of urine passed, and which contains a variable percentage of sugar and an increased specific gravity. Many causes appear to have an influence in its production, but the most constant are those morbid states influencing the liver and pancreas. Puncturing the floor of the fourth ventricle midway between the origins of the auditory nerve and paravagus, abscess or injuries near this point in the brain, disease of the spinal cord or medulla, partial or complete excision of certain organs, spleen, etc., will produce the disease; and it may appear temporarily in acute febrile processes as rheumatism, pneumonia, and other diseases, or after the use of certain drugs, as chloroform, turpentine, etc. The close relationship between the sympathetic nervous system and the fourth ventricle, and the fact that the sympathetic system is a controller of glandular nutrition, would indicate that stimulation of this system results in an alteration of the character or quantity of secretion or excretion of the cells of certain glands, and that the center for stimulating the glycogenic cells is at some point on the floor of the fourth ventricle. Heredity is also a predisposing cause of its developing. Pavy has shown that defibrinated arterial blood injected into the portal vein produced, within forty-five minutes, from ten to fifteen grains of sugar to the ounce of urine. Defibrinated venous blood would not give a like result, and concludes "that oxygenated blood in some manner influences the liver so as to lead to the production of glycosuria by a paralysis of the vaso-motor dilators (constrictors) of the liver, creating a hyperemia of the organ and a consequent inability of the cells to oxidize the glycogen perfectly."

The excess of oxygen in the blood injected in his experiments favored such excessive accumulation of glucose that the tissues were unable to draw rapidly enough upon the supply, and all above normal demands were carried through the blood and excreted as glucose by the kidneys. A special ferment contained in the pancreatic juice is responsible for the breaking up of the sugar or starch contained in food and its conversion into glucose in the intestine. From the intestine the glucose is absorbed and carried by the circulation through the portal vein to the liver, there to meet the special glycogenic ferment, and is converted into glycogen, and later into glucose, which in certain pathological conditions is eliminated as such by the kidneys. If the pancreas be extirpated a true diabetes mellitus follows in the majority of instances, and on the post-mortem table nearly all diabetics have a diseased pancreas. The inference is, therefore, that either disease or absence of the gland is a cause of diabetes, in that the glycolitic ferment is not

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Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Association, May, 1892. For discussion, see page 404.
present to split up the sugar resulting from digestion into glucose, that it may enter the circulation as a properly elaborated food.

As is well known, there are often coincident gastro-intestinal disorders in an attack of diabetes. These troubles generally partake of a diarrheal type and are difficult to manage; the discharges in two cases coming under notice were very frequent, unattended with pain, pale in color, and contained undigested food. In one case the diarrhea had continued unchecked for a period of fourteen months, in the other only about two months. In these cases there seemed to be a lack of digestive ferments, and though there was no jaundice at any time, there was a peculiar anemic pallor about the face.

The disease is very insidious in its onset, and is seldom recognized early, in fact accident is most likely to direct attention to an examination of the urine, and the discovery of sugar clears up the diagnosis at once. Perhaps attention may be called to the frequency of micturition, increased flow and high specific gravity, or to the abnormal appetite, or to a troublesome skin disease, boils, pruritis of the vulva or glans penis, to a falling off in flesh, great thirst, ocular disorder, or paralysis; a few minutes use of the test-tube and urinometer opens the way for a rational treatment of a disease which had previously not been suspected.

To detect the presence of sugar, Fehling's or any of the various modifications of the same are most convenient and trustworthy; nevertheless, reliance should not be implicitly placed upon a single test or method; it is better to confirm the first by several. Fermentation of the suspected urine with yeast offers an excellent method of determining both the presence of sugar and the amount, as with the possible exception of inosite, nothing in the urine will cause the growth of the yeast plant. Albuminous urine should be boiled and filtered before applying any of the sugar tests or the test-tube will be filled with aropy or flocculent precipitate. The quantitative copper solution mentioned on page 475 of Dacoita's Medical Diagnosis will give good results, and can be depended upon to keep all its good qualities for a long time, and will react to one half grain of sugar per ounce of urine, giving a greenish-yellow color to the fluid on boiling. There are several misleading reactions, however, with either the copper or bismuth tests, which are of practical importance. The presence of an excess of uric acid or urates will give a discoloration in the copper test very similar to that of sugar in small quantities. This can be readily proven by using urine from a case of acute articular rheumatism before it has become alkalized. Adding the copper solution and heating brings out a more or less intense yellow color in the fluid, of about the same intensity in color as would be given were there one half grain of sugar. This discoloration is also present if the patient has been taking salicylic acid or any of its combinations. Boetger's or the bismuth test will be also affected if albumen or mucus is present, the bismuth being darkened by the sulphur in the albumen. In an experimental solution of honey in normal urine, at 1020 specific gravity, acid to litmus, the copper test gave increasing shades through green-yellow, yellow-green, yellow-red, and finely powdered red, the latter being visible when two and a half grains of honey had been added. The bismuth was perceptibly darkened, however, by one half grain, and increased in color until it became quite dark at two grains.

If Robert's suggestion of heating the Fehling's solution and adding the urine to the hot solution is adopted, there will be less likelihood of error. If sugar is present to the extent of two and a half grains or more, fermentation with yeast is sure to give absolutely correct results. The difference in the specific gravity before and after fermentation must be noted and for every degree's difference one grain of sugar must be estimated, and the total amount daily excreted calculated. The liquor of fermentation should be also tested, that it may show whether the sugar has been entirely converted or not.

Diabetes is subject to exacerbations from various causes. Mental worry, next to the intemperate indulgence at table, is one of the most prolific sources of disappointment when treating a diabetic. A celebrated divine, editor of a flourishing religious paper in a neighboring city, always noticed an increase in unfavorable symptoms and more sugar in the urine when the cares of the paper pressed upon him too severe-
ly, or when some difficulty presented itself to him in the proper discharge of his duties. He was finally unable to continue the responsibilities of editorship. Diet has much to do with the disease; a total exclusion of farinaceous foods, sugar, or any thing containing either is imperative for the good of the patient. Nutritious nitrogenous articles of diet must be advised, and the bill of fare so arranged daily as to avoid repugnance to the articles provided.

As to bread preparations, there are a number of diabetic flours and flour foods on the market, but they all contain a greater or less per cent of starch. To roughly determine their value, four samples from different manufacturers and one sample of best roller process family flour were taken and tested with iodine for starch. All samples, both raw and cooked, gave more or less marked blue, No. 5 least so; Nos. 1, 2, and 4 gave a slight sugar reaction, with Fehling's test before cooking. After cooking five minutes, all gave a sugar reaction, Nos. 1 and 5 being most marked, Nos. 2 and 3 changed to a lemon color when tested, the others red. Twenty grains from each sample were taken and carefully cooked in a flask on a water bath, and to each were added two drams of saliva, and subjected to a temperature of 70° F. for twenty four hours. They then presented the following results: No. 1 was the only sample showing traces of undigested starch, and this but faintly. Testing for sugar, a marked reaction took place in No. 1 only, the others presenting a more or less intense light yellow or fawn color with Fehling's test, and a slight reaction with Boetger's. To further prove the presence of sugar, forty grains of fresh yeast was added to each of the foregoing solutions, and fermentation allowed to proceed twenty four hours, with the following result: The specific gravity remained unchanged in all except common flour, which indicated between two and three grains of sugar per ounce. On testing the liquor of fermentation with the copper solution, the same light yellow or fawn color was observable as was noticed previous to fermentation and was probably due to amylase or dextrin. Long boiled mucilage of Iceland moss and also of sunflower seed, when treated with Fehling's solution gave the same variety of color as the food preparations. From the slight reactions in all these foods No. 5 appears to be the best, while Nos. 4, 2, and 3 rank next in value. These foods are very digestible and nourish the body well, and aside from the dark bread they make and its inclination to "fall" in baking, the patients appear to like them quite well.

As to the peptonic theory of diabetes or peptonuria, a carefully selected diet can certainly benefit the patient, and the indiscriminate eating of carbo-hydrates, as is advised by some practitioners, surely adds to the load already laid upon the stomach and digestive functions, and is productive of a more rapid advance of the disease. Of three cases now under treatment, two presented nerve disturbances, which suggested an analysis of the urine. Briefly stated, they are as follows:

1. Mrs. S., aged twenty-eight, has aborted five times from natural causes at periods ranging from two to six months. Placenta usually fatty. Last abortion August 29, 1891. Shortly after resuming her household duties, symptoms of locomotor ataxia, consisting of tinglings in the fingers and toes and formation, inability to balance herself with the eyes closed, or to step over the carpet sill, go up a step without using both hands and feet, tripping over slight obstructions, dropping articles from her hands, and a total abolishment of the tendon reflexes made their appearance. From four to six quarts of urine passed daily, thirst, increased appetite, diarrhœa, loss of weight, sleeplessness. Urine 1030 to 1036 specific gravity, and responded to Fehling's and Bobetger's tests; fermentation gave ten grains of sugar to the ounce of urine. At present all these symptoms have disappeared, except that there is yet no knee jerk.

2. Mrs. N., aged sixty-five, subject to ocular trouble for more than a year, and has been under treatment by a specialist for cataract. Seen on March 19, 1892. She had retired on the night of the 18th feeling in her usual health, which had not been good for the past year or two, and awakened in the morning to find her speech impeded. Examination showed her to have right glasco-labio-laryngeal paralysis; inquiry developed the fact that she passed from
six to eight quarts of urine daily, and could not sleep well on account of micturition. There had been diarrhea for more than a year past. Thirst and an increased appetite and a general wasting of the body had been noticeable. A sample of her urine gave an estimate of thirty grains of sugar to the ounce, specific gravity 1036. Under treatment the urine dropped to five quarts daily of 1028 specific gravity and twenty grains of sugar per ounce. The paralysis also improved.

The results of examinations of the urine in case No. 2 are annexed:

<table>
<thead>
<tr>
<th>Date</th>
<th>Specific Gravity</th>
<th>Daily Amount of Urine, quarts.</th>
<th>Reaction</th>
<th>Feinting-Score for Sugar.</th>
<th>Specific Gravity after Generative Texture</th>
<th>Sugar per Ounce of Urine, grains.</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 20</td>
<td>1036</td>
<td>8</td>
<td>acid</td>
<td>+</td>
<td>1006</td>
<td>30</td>
</tr>
<tr>
<td>April 4</td>
<td>1033</td>
<td>6</td>
<td>acid</td>
<td>+</td>
<td>1012</td>
<td>20</td>
</tr>
<tr>
<td>11</td>
<td>1035</td>
<td>5.4</td>
<td>acid</td>
<td>+</td>
<td>1006</td>
<td>29</td>
</tr>
<tr>
<td>17</td>
<td>1034</td>
<td>5.4</td>
<td>acid</td>
<td>+</td>
<td>1007</td>
<td>27</td>
</tr>
<tr>
<td>24</td>
<td>1030</td>
<td>5.4</td>
<td>acid</td>
<td>+</td>
<td>1008</td>
<td>22</td>
</tr>
<tr>
<td>May 1</td>
<td>1028</td>
<td>5.4</td>
<td>acid</td>
<td>+</td>
<td>1006</td>
<td>22</td>
</tr>
<tr>
<td>8</td>
<td>1032</td>
<td>5.4</td>
<td>acid</td>
<td>+</td>
<td>1008</td>
<td>24</td>
</tr>
<tr>
<td>15</td>
<td>1032</td>
<td>5.4</td>
<td>acid</td>
<td>+</td>
<td>1006</td>
<td>26</td>
</tr>
</tbody>
</table>

In the treatment of these cases a strict diet was maintained and hygienic regulations, and moderate outdoor exercise advised. Arsenic in the form of the solution of the bromide or Fowler's solution in doses of from three to five drops after meals has been employed. The drug has had a remarkably beneficial effect in all the cases, the quantity of both urine and sugar diminishing, the diarrhea abating, and the gastric symptoms disappearing. Though other remedies, such as codiea, salicylate of soda, syr. lactophosphate of lime, etc., made with glycerine instead of sugar syrup, had at first been tried, none of them could be compared with arsenic for promptness of action and restoration of function.

A remedy lately become prominent is jambul, and it might be worthy of a trial, as continental writers report cures from its use. According to the most careful observations, its action is "in preventing, to a marked degree, the conversion of starch into sugar in the alimentary canal and of glycogen into sugar in the tissues."Desiring to test the efficacy of the drug, five minims of the fluid extract were given three times daily to the cases referred to above. The treatment began May 10th, and a comparison made on May 16th, the patients being restricted as to diet; on May 10th the urine in case No. 1 showed a trace of sugar; on May 16th there was about two grains of sugar per ounce of urine. Case No. 2 on May 10th: urine contained twenty-four grains of sugar per ounce, and on May 16th there was twenty-six grains to the ounce. The quantity of urine in case No. 1 was slightly increased, while it remained the same in case No. 2, viz., 5½ quarts in twenty four hours. One case of transient glycosuria with pruritus vulvae was much improved, the sugar entirely disappearing from the urine and the pruritus improving under the jambul. It is of course too early yet to say what the remedy will do in these cases, but from this limited trial it does not seem to be as yet a specific, or that it is best to allow a patient a sugar-forming diet.

AMPUTATION OF THE BREAST FOR MALIGNANT DISEASE.*

BY H. HORACE GRANT, M. D.
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The progressive surgeon of the present era, with the welfare of his patient as the objective point of his efforts, and his confidence in the security of the armor which new and progressive experimental science has provided against infection, no longer consults statistics and literature before he begins his operation, but, perfecting by accurate methods his diagnosis and assuring himself of the constitutional resistance of his patient, surrounds the operating table with conditions necessary for success, and takes up his knife to cure.

In "A Plea for Progressive Surgery," a late ex-president of this Society has shown in a recent address that true conservative surgery is radical even to heroism, yet preservative to the confines of safety.

Justifiable surgery is one thing, and successful surgery is another. And, without going to

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* Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Society. For discussion, see p. 405.
any mention of what constitutes either, it is easy to see that one may do justifiable surgery which is not successful, and successful surgery which is not justifiable.

Among the great number of men who will or must do surgery there are a few leaders—leaders from ability, from force of circumstance, from position, from accessibility; these are the teachers of the rest; upon them in large measure rests the burden of surgical advance.

If, from conceit of their ability or from the nature of surroundings, they essay operations whose mortality largely outweighs in worth their good, even in the ablest hands, and without due consideration precipitate crude surgical opinions upon an unprepared class of followers, the tears of many thousands, needlessly bereaved, are at their hands. The day may be early coming when there will be no opprobrium in surgery save ignorance of the proper methods and incompetency in execution. Though this day has not arrived, yet it is true there should be no compromise in completeness short of the limits of safety.

The subject of this paper is one on which there has been wide difference of opinion, though the very large majority of surgeons are on the side of radical operation, some of the very ablest believe in only the palliative steps and partial removal.

In discussion of this most important operation, important because of its ever-recurring need and the vital necessity of its proper execution, statistics are of little value. True though it is figures will not lie, yet, through the incompleteness of reports and the carelessness and inaccuracy of compilers, statistics may be made to support or to destroy nearly any theory.

It is the intention to present in this paper only the logical side of the question; certain facts, however, are well established.

The average duration of life in carcinoma is less than three years from the time of discovery of the tumor, and ten per cent of all deaths from carcinoma are breast cases alone. The affection is invariably fatal after a most painful and loathsome course, and occasions the most melancholy mental distress.

The percentage of recurrences after the old operation, usually incomplete, is seventy-five per cent.

In sarcoma the progress is more rapid, and the diagnosis in the early stages difficult. It occurs more frequently early in life, and if hesitation permits its continued growth it soon becomes inoperable. When attacked early its removal is simple compared with the radical operation for carcinoma, and the prognosis probably more favorable. Repeated operations are to be undertaken without hesitation whenever the sarcomatous evidences reappear; the comparative insensitivity of the operation makes it doubly appropriate. If unarrested sarcoma is early fatal. That both carcinoma and sarcoma develop as local affections is an undisputed question; how far predisposition or inheritance may contribute to development is not determinable. Were it certain, however, that such influences were constant and effective, the propriety of the removal of any attempt at location as early and as thoroughly as possible would still be an imperative duty.

The influence of heredity is perhaps wholly in the limits of tendency or predisposition, and is more positively shown in many malformations and incompletions of development than in any direct constitutional manifestations, save perhaps syphilis alone.

Surely no surgeon would hesitate to operate on a hare-lip, or a club-foot, or a cross-eye, because it was a family characteristic, as it is so very commonly the case; fully as practical, it seems, would be an objection to remove the local determination of carcinomatous predisposition when accessible and eligible.

Granting every claim made by those who favor incomplete operations, or who absolutely decline to operate, there are but three objections to the demand for fullest relief, that is the uncertainty of diagnosis, the increased mortality when the axilla is invaded, and the probability of early recurrence.

With respect to the first objection, it is but fair to say that hesitation is to be observed in the young when the functional activity of the mammary gland is a matter of great importance and when the probabilities of carcinoma are few, where chronic inflammations and
abscesses, adenoma, and various benign cystomas are the rule.

While carcinoma can usually be excluded under these conditions, sarcoma is often simulated. At the very worst, an exploratory incision can add nothing to the gravity of the non-malignant condition, but will readily establish a diagnosis while there is yet full time for help.

After the fortieth year all removable tumors of the breast should be excised, the earlier the better, without regard to diagnosis.

The overwhelming balance for good in such a plan leaves the few removals of benign tumors out of deserving thought.

While this article was in progress I removed the right breast of a woman, fifty-seven years of age, for what had been diagnosed chronic abscess, but which proved a rapidly growing seirrhus. The woman reports that in 1842, about her sixteenth year, the elder Gross excised the left ramus and angle of the inferior maxilla for "a bleeding cancer": perhaps a malignant epulis. There is no reproduction of the jaw, but no farther sign of cancer from them until now.

With respect to the second objection, it may be said that there is no argument against interference so strong as incomplete work. Better do nothing than half do the operation. Even after the most radical steps the mortality must always be trifling in competent hands. Under the present system of surgery there is but one danger of the older authors left to fear, shock, unless by accident some injury be done the great axillary vessels.

In a recent paper of great thoroughness, and consequently valuable in a statistical way, Dennis, of New York, reports 71 cases of complete removal of the breast with but one death, and that from hemorrhagic diathesis. I have nine times removed the breast and opened the axilla without accident, and almost without shock, usually securing primary union, and getting the patient out of bed in a week.

These operations were all done within the last three years, and were done in private practice. The patients are living with but one exception; in this case death occurred the fourteenth month from carcinoma of the liver, there was also recurrence in the cicatrix. In one other case, in which a considerable portion of the wound was left to heal by granulation, owing to extreme infiltration the cicatrix has always had an unhealthy look and occasionally weeps a non-offensive serum, but the general health of the patient is wonderfully improved; indeed perfect but for some disabling of the arm on the affected side. And now, after quite two years, she feels that she was rescued from the grave.

The other six patients are without any evidence of disease.

This number is far too small to consider as data, and the microscopical record of several of the cases is wanting, hence no detailed report is worth while. They merely help to show what may be gained by complete operation, and that the added danger is practically nil.

The recent case above referred to is progressing well.

With respect to the recurrence of the disease I shall say little.

The title of Dr Dennis' paper, above referred to, is "Recurrence of Carcinoma of the Breast." He gives as the influences of recurrence:

1. The age of the growth.
2. The extent of infiltration.
3. The completeness of the operation.
4. Histological character of the carcinoma itself.

He claims that of this last cause he has made careful study, to find that in proportion as the histological character of the tumor varies from that of the surrounding structure it is malignant and recurrent. As a result of Dr Dennis' operations, the percentage of cases surviving three years without recurrence is thirty. A very considerable proportion of the remaining were progressing well, but are not yet up to the three-year limit.

Thus, then, we have the practical aspect of the case:

Certain and early death without operation.
Accurate and early diagnosis in doubtful cases by incision.
Safe and reassuring aid by complete operation.
A most encouraging hope of cure in one third of all cases.
To secure such results, however, is demanded early and complete operative steps, even in the most favorable looking cases. It is impossible to tell the extent of infiltration, or the amount of lymphatic involvement. The operation must be radical to the extreme.

There is a certain class of patients upon whom no capital operation can be undertaken. In addition, there are cases of carcinoma and sarcoma in which the infiltration and ulcerations are so extensive, in which vital structures are so invaded, or in which metastases are already present, which positively contra indicate operation. These any wise surgeon will recognize. But of the other class of cases, which promise so much, there is every hope that care and persistence will determine results now past belief.

The operation: At the inner angle of the wound a granulating surface heals with great ease, and no fear need be entertained in cutting away freely. It is always best to remove completely the skin under which the cellular tissue is infiltrated, even with inflammatory products. To dissect off such deposits leaves a thin flap which may slough, and less satisfactory repair is obtained than when a free open wound is made at once. All fascia, and all infiltrated muscle, even to the ribs, should be completely cut away, with resection of the bone involved.

In firm but non-infiltrating tumors which dissect off freely, the muscular surface should be left, stripped of fat and fascia. The flaps adhere more readily to clean muscular surface, and sloughs are less likely under unfavorable conditions.

When the infiltration and ulceration are considerable, it is always imperative to make an incision to circumscribe all possible disease, without regard to the feasibility of getting flaps.

In removal of the glands the vessels should always be exposed by extending the incision to the insertion of the great pectoral muscle, and locating the axillary vein. All fat, fascia, and glandular tissue should be removed. The subscapular vein should be tied before division if it can be found. There will then be no hemorrhage, unless the muscles are divided. This step may be necessary when infiltration has invaded these structures; even the axillary vein has been resected when found diseased. The fingers should be passed up and under the pectoralis minor and between the pectoral muscles and the sub-clavicular space searched for glands always.

The wound should be irrigated with 1–1,000 hot bichloride, then washed out with 1–3,000. A short drain should be put in the axilla and brought out through a counter-opening. The axillary wound should be closed as far as approximation can be made; if the inner part of the wound can not be covered, it should be left to granulate.

Skin grafts after Theirsch's method are not satisfactory, except under special surroundings. If the inner end is closed up a short tube is placed in this angle also; the tube should be removed in forty-eight hours unless otherwise indicated. The best material for sutures is silk-worm gut; next reliable cat gut. Tension sutures of large silk are appropriate sometimes. The ordinary iodoform and gauze dressing is to be applied. The wound will be redressed in about twenty-four hours: the tubes so placed in the dressing that they can be taken out next day without disturbing the overlying gauze; the arm should be bound loosely in a sling. Redressing will depend on the nature of the wound; if there is no surface left to granulate redressing will not be required unless some accident permits suppuration. The granulation surface must however be looked after. The patient may be allowed to be up about the fourth day, if she does ordinarily well; even granulation cases I think do better out of bed.

If the resulting cicatrix looks unhealing, or if the wound fails to heal, it is unwise to be in a hurry to operate, as such conditions frequently ultimately get well.

I have intended in this paper to urge the the practical side of a case which demands in the interest of human life promptness and thoroughness at competent hands, wherein accuracy of diagnosis is a secondary consideration to readiness and completeness of work; and to record my belief based on a confidence in the established principles of present surgical science, that it is little less than criminal to withhold, through overcautiousness, from suffering women
that relief which will surely rescue many from the ravages of a loathsome and fatal malady, and will secure to many others years of comfort; and which promises, through a diligent and courageous application of an efficient aid, even greater victories than the most sanguine dare predict.

LOUISVILLE.

Societies.

KENTUCKY STATE MEDICAL SOCIETY.

Stated Meeting, Louisville, May 4, 5, and 6, 1892. Dr. H. Brown, of Hustonville, Ky., President, in the chair. Concluded, from page 385.

Dr. John A. Ouchterlony read a paper on Clinical Observations on Epidemic Influenza. (See page 385.)

DISCUSSION.

Dr. T. B. Greenley: What we call la grippe or influenza has more characteristics than the symptoms of any disease you can imagine. I have had some experience in treating the disease, and I have seen nearly all the symptoms which we have an account of in various cases developed, but I have never seen all the symptoms in one case at the same time. I think if all the symptoms attacked a patient at the same time he would hardly recover.

As to the cause of it, I think it is very doubtful. We see it on the Continent spreading rapidly north and south. It has no respect for cold or hot weather. A week or ten days hence we hear of its prevalence in Boston, then at Chicago, rapidly spreading all over this country. If a microbe can travel that rapidly he is the most rapid traveling plant that I have heard of. Then, again, the disease traverses the sea. A short time ago it was not long in coming from Russia over here. It is astonishing how rapidly the disease travels, or rather the germ, considering the adverse winds it had to contend with.

I hardly think that one microbe produces the symptoms the disease manifests on several occasions. There must be several microbes. We hardly see all the symptoms develop in one case. In some cases I have seen intense neuralgia. The patient would cry out with frontal neuralgia and intercostal neuralgia, so that I was compelled in some way to alleviate the terrible suffering and render the patient moderately comfortable. I have seen one case die with it. We have some sequelae, as the essayist says, and in old people it has a general debilitating effect on the nervous system. There is a probability of heart-failure in old people. I have ventured but slightly on the antipyretics and analgesics for fear I might do some injury when the nervous system was depressed by the character of the dose. I advise quinine in tonic doses, and, when I give that or some other supporter, fortunately I have had no mortality in treating the disease.

Dr. Ewing Marshall: I would like to ask Dr. Ouchterlony whether the patient kept up the treatment for a long time after the attack began, and if it made the attack worse in any respect?

Dr. Ouchterlony: In reply to Dr. Marshall, I will say that not only myself, but a number of foreign observers, have noted that those patients that went to bed early at the very onset of the disease, or those whose occupation necessitated them to be indoors, not only got along much better, but did not have the disease so frequently as those who spent their time in outdoor occupation. The sooner the patient gave up to the disease the more rapidly convalescence set in, and the less likely was he to suffer severely and to be the subject of complications.

A member: I would like to ask whether any of the gentlemen have noticed a reduction in the temperature below normal.

Dr. J. W. Irwin: I hardly know what I can say in addition to what my friend, Dr. Ouchterlony, has said in his elaborate paper. He has covered the ground so thoroughly that he has left very little to be said. His remarks on the history, diagnosis, prognosis, symptomatology, and treatment correspond to what I have observed myself. I do not agree with him in the administration of synthetical drugs for the relief of pain. This is a disease that attacks the nerve centers primarily, and in attacking these centers it begins to depress the vital powers, and why should we help it along by the administration of drugs that tend to increase this trouble?
Dr. Lewis Frank read a paper on Clinical Bacteriology and its Importance. (See p. 393.)

DISCUSSION.

Dr. J. O. Jenkins: I am pleased with what the doctor has said regarding the microscope, especially in tuberculosis. I have been treating tuberculosis with tuberculin, and have treated a good many cases. In two cases where the physical signs were positive, as confirmed by other diagnosticians, there was no bacillus present. We could not explain it. The post-mortem signs were perfect, and yet no bacillus could be found. I just mention this to show that we sometimes expect a thing and do not get it.

Dr. J. B. Marvin, Louisville: I congratulate my young friend, Dr. Frank, on his very excellent paper. There are several points it illustrates, and first, "that a little learning is a dangerous thing." It seems that a few men have picked up a little knowledge in regard to the germ theory and have gone around blowing about it and scattered a good deal of error, and instead of advancing the progress of science they have retarded it. We hear people talking about germs just as though they were great big objects. Why, if you met them in a big room you would not know them.

Another point. Whether you believe in the germ theory or not, whether you believe that these germs are etiological factors, hardly anybody at the present day denies the great diagnostic value of some of them. Take the first aspect of the paper, tuberculosis, its diagnosis. It seems to me that the two good genii of the grounds of the ignorant doctor are malaria and hysteria. We see a case with a little intermittent or remittent fever, little or no cough; we say it is malaria, and, flattering to our soul, we fan that patient with hope until the golden opportunity has slipped by. It is not an easy matter to make a physical diagnosis in these cases. There may be consolidation so slight or scattered about that you overlook it. An examination of the sputum will clinch the diagnosis when you are in doubt. The most expert may be in doubt as to whether it is some benign or fatal trouble.

Take the other division of the paper, mala-
ria. Who among us, in our climate especially and all through the Southwest, does not feel trouble and doubt in mind about typhoid fever.

He will not make a diagnosis before two or three weeks have elapsed, when there is diarrhea, rose-colored spots, nose bleeding, etc. We would make the diagnosis before that, if it is possible, by an examination of a mere drop of blood from the end of the finger, to say absolutely and positively that this is not typhoid, but some other form of fever—malarial fever. If we could do this it would be a great boon. I am in hopes that the whole history of the malarial fevers of our country will be rewritten in the next decade. I confess the examinations I have made have not given me as much assistance as I have been led to believe from the authors quoted. As the bacillus mentioned by the essayist has not been cultivated, it may be a question whether it is the cause of malarial fever or not. Certainly, it can not be disputed that every authority claims that it is constantly present in malarial fevers, and not present in other troubles which simulate it.

The last point mentioned in the paper was with reference to the gonococcus. Fortunately, I think, we see comparatively little of the specific ophthalmia which destroys the eye where cleanliness is generally practiced; but it is a capital means of diagnosis. I think the ordinary doctor, if not on his guard, will be more liable to err and confound an ordinary harmless micrococcus with the specific gonococcus from an examination of the discharge than he would the tubercle bacillus or the germ of malaria.

I desire to say that Dr. Frank was once my pupil, and as he alludes to the diagnosis of typhoid fever by elimination, he has reference to some of the lectures I had the honor of delivering to him some three or four years ago on the subject of elimination of typhoid fever diagnosis in our part of the country by the administration of quinine. It is a pretty good illustration of how we are moving in medicine. It was quoted in English works also, that is, the differentiation by quinine as to whether we are treating typhoid fever or not. It is an impossibility in the Southwest to diagnose typhoid fever as has been done in the New England States in the first two or three days visiting the patient. I think Dr. Frank's paper is one of the most scientific contributions to which we have listened. He is mapping out ground for us in advance. I thoroughly believe in the microscope, and think every practitioner should use it, for we have gone too far to retrace our steps in this direction. The revelations of the micro-organic world are real. We are following laggardly in this particular. Great advances have been made in this line, and the time will come when it will be our practice to diagnose cases by the aid of the microscope.

Dr. Louis Frank, Louisville: One of the gentlemen (Dr. Jenkins) said that in the autopsies he had made tuberculosis was demonstrated, yet in the sputum no tubercle bacillus could be found. I would like to ask him how many slides he examined to know. It is necessary to examine sixty or seventy slides before we can make a positive diagnosis.

The point I wish to make as to malaria and the gonococcus of Neisser is, that the bacillus of malaria has not fulfilled all the requirements that an organism should of the conditions that are necessary to prove that it is a pathogenic organism. We have found organisms in the body of those suffering from the disease, and we have been able to inoculate others in which previously the plasmodium did not exist, and found after inoculation they were present.

Baum has made pure inoculations of the gonococcus and has inoculated the urethra of man, producing specific urethritis, from which he obtained pure cultures of the germ. This has fulfilled all the conditions necessary to produce an organism that is pathogenic. It must be present in all cases of the disease.

Dr. J. O. Jenkins read a paper on Diabetes Mellitus. (See p. 395.)

DISCUSSION.

Dr. John A. Larrabee: The points made by the essayist are very prominently brought out. The fact of the effect of pancreatic secretions in the intestine producing this change in the sugar product or starches is one that has not been sufficiently insisted upon. The experiment well known to us all of the injection of sugar into the veins not directly producing
glycosuria, but the fact of the ingestion of starchy products in the intestines doing it, bears out the idea of the essayist.

Another point. The doctor did not insist sufficiently upon the etiology of the disease bearing upon hereditary nervous predisposition. I believe it is a fact, borne out by statistics, that diabetics are the descendents of diabetics to a great extent. Whether or not their ancestry show it by heredity, there is almost always a condition of nervous transmissibility in parents. This point I have been struck with, especially in getting the history of cases of diabetes, and it would seem that with this condition there was organic disease demonstrable in the brain sufficient to produce it. The essayist alludes to it under the head of mental strain, mental worry. That of itself does not produce it unless there is a drisopy.

I wish to add one word with reference to jambul. I have used it and think it is a most admirable remedy, one which is worthy of the confidence of the medical profession. I have used it in three cases of very pronounced, long-continued glycosuria or diabetes with astonishing results. The fact that we do not have to change the diet with it is a strong point. With the use of jambul you can allow the patient to eat anything he wants.

Dr. J. O. Jenkins: I acknowledge the pertinency of Dr. Larrabee's remarks. They are to the point. Heredity plays a prominent part in the development of the disease, and patients of the neurotic type are more liable to it than others. I did not wish to burden my paper with a recital of cases. I know of three brothers, one of them a medical student, who, being in ill health, had an examination of his urine made, and sugar in quite a large amount was found. The physician suggested bringing a sample of urine from his brothers also, and he found that the two brothers were affected in the same way. Diabetics in that family could be traced back to two generations.

Dr. H. H. Grant read a paper on Amputation of the Breast for Malignant Disease. (See p. 398.)

DISCUSSION.

Dr. W. L. Rodman, Louisville: I have been interested in the paper of Dr. Grant bearing on the surgical treatment of malignant disease of the breast. It has been shown by Butling, who has paid particular attention to the subject, and has given us the results of operations for malignant disease, that in no part of the body, save in the lip, does excision give as good results as it does in operations on the breast. The results attained from epitheliooma of the lower lip are the only operations done in the body where the results are as good as in operations upon the breast.

As to the enlarged glands which are so often found in connection with malignant growths, I wish to say that I do not believe it is possible for the best diagnostician to detect the presence of enlarged glands in the axilla without opening the axilla; in fact, I have seen some of the best surgeons in this country utterly fail to detect the presence of enlarged glands in the axilla without making a free incision. In all cases where malignant disease is suspected, especially in women who are fat and flabby, the axilla should be opened up and the glands picked away from the axillary vessels.

I did not hear the first part of the paper in which the doctor urged the cart-wheel or free incision. Where you make any attempt to remove a tumor from the breast, you should remove the breast entirely. It is unquestionably the best operation which can be practiced. At least ninety per cent of all tumors of the mammary gland are malignant, and by making a free incision and cutting a wide mark is the way in which you can hope to get a good result. I do not believe there can be any doubt as to the propriety of early operation in all of these cases. The sooner we see them, the more radically we operate upon them; the more tissue we remove, the better the result in the majority of cases.

KATZENJAMMER.—Resorcin is said to act admirably in cases of nausea and depression following a carouse. It is given in the dose of from five to ten grains in plenty of water flavored with syrup of orange peel, and may be repeated once or twice at intervals of half an hour. A dose of ten grains is said to be usually sufficient.—Brooklyn Med. Journal.
Abstracts and Selections.

Two Cases of Concussion of the Spinal Cord.—As a further contribution to the literature of concussion of the spinal cord, I think the following cases, which occurred in the practice of Mr. Le Gros Clark (who has kindly given permission for their publication), worth recording. I have copied them from my case-book notes made during the winter session of 1871–72, when acting as dresser:

W. C., aged twenty, laborer, residing in Lambeth, was admitted into Albert Ward on December 13, 1871, suffering from an injury to the spine. The patient states that while employed in unloading a barge he had to carry a basket weighing 100 lbs. along a plank twenty-eight feet in length from a barge to the wharf. At the end of the plank was a ladder, up which he had to go. He got his foot on the first step, and was proceeding to ascend the second, when he slipped and fell across the plank, the edge of which struck against the small of his back. At the same time he let go the basket, which fell on his abdomen, thus jamming him between the plank and the basket. He was prevented from falling into the river. He was unconscious for a short time. On admission, about one hour after the accident, he was found to have sustained a fracture of the spinous process of the fourth lumbar vertebra, with depression. The lower extremities were cold and paralyzed. As he could not pass urine, a catheter was introduced into the bladder. December 14th: The patient slept but little last night. He complained of shooting pains in the back. There is complete loss of sensation from two and a half to three inches above the umbilicus, extending all down the lower extremities. He has no control over bladder or rectum. Catheter to be passed three times a day. On going round late at night this patient was found to be lying on his left side. His bladder had emptied itself, he being unconscious of it. 15th: This morning he passed his urine consciously. There is some return of sensation about flanks and umbilicus. 19th: He has recovered sensation over the whole abdomen and lower extremities, also control over the bladder. Eats well, sleeps well. He attempted to leave the hospital last night. 27th: Gets about now. Sensation and motion of lower extremities perfect. Discharged cured.

R. P., aged forty-nine, clerk, admitted into Albert Ward on March 10, 1872, at 12:15 A.M. About three hours prior to admission, while under the influence of alcohol, he slipped down a flight of stone doorsteps. On admission, the lower extremities were cold and sensation consider-

ably diminished. He was very tender in the lumbar region. March 11th: Has dozed during the night. Sensation has nearly returned. No retention of urine. Cough troublesome. The following mixture was ordered to be taken three times a day: One dram of compound tincture of camphor, two drams of liquor ammoniac acetatis, one dram of mistura acacice, to an ounce of water. March 13th: Sensation has now quite returned. Sleeps fairly. Cough better. 21st: Doing well. To get up. 25th: Up and walking about. 25th: Discharged cured.—F. Le Gros Clark, F. R. S., London Lancet.

The Bacillus of Measles.—The Berliner klinische Wochenschrift of April 15th, contains a paper by Drs. P. Canon and W. Pielicke, Assistant Physicians to the Moabit Hospital, Berlin, in which they give the results of researches on the bacteriology of measles recently made by them at the suggestion of the director, Dr. P. Guttmann. They point out that cocci have been found by various investigators in the lungs of persons who have died of pneumonia complicating measles; and that Babes found micro-organisms not only in the lungs, but the lymphatic glands, the mucus of the nasal fossae, the conjunctival secretion, and in the exanthematosus patches themselves; he also found cocci in the blood obtained from the papules, and in one also very short bacilli. In cultures he obtained streptococci which bore a resemblance to the S. pyogenes. Canon and Pielicke made stained preparations of the blood of fourteen patients suffering from measles, and in all cases they find "one and the same" bacillus. The preparations were made in the same way as in Canon's researches on influenza, and were stained with an eosin-methylene blue solution. They now generally employ a solution composed as follows: Concentrated watery solution of methylene blue, 40.0; ¼ per cent eosin solution (in 70 per cent alcohol), 20.0; distilled water, 40.0. The preparations were placed from five to ten minutes in absolute alcohol, then from six to twenty hours in an incubator at a temperature of 37° C. The following solution was also used with advantage: Concentrated watery solution of methylene blue, 80.0; ¼ per cent eosin solution (in 70 per cent alcohol), 20.0. From two to three hours in an incubator suffice for staining. In the preparations the bacilli were found stained blue, sometimes uniformly, but frequently much more deeply at the ends than in the middle; sometimes only the edges of the middle portions were stained. The size of the bacilli is very variable; sometimes they are as long as half the diameter of a red blood corpuscle,
sometimes they are quite small, and have the appearance of diplococci; between these two extremes they show several gradations in size. Occasionally they are of extraordinary length, almo-t equal to the diameter of a red corpuscle; in that case they do not stain uniformly, but present three or four colorless spots alternating with the stained portions. As a rule this form of organism does not stain deeply, the ends in particular often showing a very slight tinge of blue. These bacilli were frequently slightly bent, and were found only in preparations made toward the end of the disease (sixth day). The author believes the bacilli found by them in the living blood in these fourteen cases of measles to be a specific kind, and to be the true exciters of the disease. They are found in very variable numbers, the first two or three preparations of one specimen of blood sometimes showing only a few bacilli, while on the other hand the field was sometimes packed close with them at the very first examination. They frequently occur singly, but in the majority of cases (12 out of 14) they were arranged in larger or smaller clusters. Their arrangement in the clusters presented nothing characteristic except that they often showed a tendency to lie parallel to each other; in other cases they lay close behind each other, and formed obtuse angles. The bacilli were found during the whole course of the disease, and in one case even three days after defervescence; in this case they had been present in unusually large numbers at the period of crisis.

As a rule, the bacilli were found most abundantly at the time of defervescence. In addition to the fourteen cases referred to, the author examined the blood of seven children who had had the measles just before, and in some of whom the rash had not entirely faded away. The results of the examination were negative. They also examined, about ten hours after death, the blood of a child who had died of measles without any lung complication, but the presence of the bacilli could not be determined with certainty; in this case the blood had not been examined during life.

Some of the preparations were stained by Gram's method; the bacilli remained unstained, but were as distinct as the red blood corpuscles. Bacilli of the same shape as those found in the blood were seen in the expectoration, and in the nasal and conjunctival mucus of patients suffering from measles. In all cases, before the preparations were made, blood of patients with measles, obtained by pricking the finger, was inoculated in glycerine agar, blood serum, or milk (woman's) but they did not succeed in cultivating the bacilli on these nutrient media. More recently they used chiefly bouillon, inoculating each test-tube with from one to three drops of blood; generally from six to ten tubes were used for each experiment. In three cases they found in the inoculated bouillon bacilli which agreed in all points with those found in the blood, but could not be further cultivated on glycerine agar, blood serum, or bouillon. The bouillon remained clear for a time, there being a sediment at the bottom of the tube which was partly deposited from the inoculated blood; after some days a slight opacity became visible, and small flakes formed which rose on shaking the tube. In these bouillon cultures the bacilli were found in different forms, sometimes uniformly stained, sometimes resembling diplococci, sometimes more like diplo-bacilli. Some of them exceeded in length the longest seen in the preparations of blood. The bacilli in these bouillon cultures do not stain by Gram's method, and they display only slight power of independent movement. In one of the three cases referred to these bacilli were found in large numbers in all the tubes of bouillon (four in number) which had been inoculated with blood; inoculations made at the same time on glycerine agar and blood serum remained sterile. The inoculations in these cases made toward the end of the fever at the commencement of the crisis; in the blood preparations made at the same time the bacilli were found in considerable numbers. This was the case in which the bacilli were found in the blood three days after defervescence. From the same child blood has been drawn into sterilized tubes, and, after having been kept two days in the incubator, inoculated in bouillon and agar. In one of the tubes containing bouillon bacilli were also found, white glycerine agar inoculated with the same tube remained sterile; here also all attempts at further cultivation failed.

By this method Bruschetti (Riforma Medica, January 29, 1892,) cultivated influenza bacilli obtained from living blood; it was several times employed by Cannon and Pielicke in the course of the present investigation, but, except in the case mentioned above, without result. In the two other cases in which bacilli obtained from the blood was cultivated in bouillon, the inoculations were made during the course of the fever, yet bacilli obtained from the blood was cultivated in bouillon, the inoculations were made during the course of the fever, yet bacilli were found in only one or two of the tubes, all the others remaining sterile. The result was also negative in a series of inoculations made from one to two days after the subsidence of the fever. Sometimes, indeed, a few bacilli (two to five) were
found in a preparation obtained from blood-inoculated bouillon, after sufficient shaking of
the tube and very careful search, but it seems
to the authors, doubtful whether this can be
taken as a proof of multiplication of the ba-
cilli. In one case, in which death was due
directly to measles, numerous inoculations of
the blood were made on different nutrient
media, including bouillon, about ten hours
after death; all these remained sterile.

Finally, an attempt was made to cultivate
these bacilli on blood serum glycerine agar by
the method employed by Weirheim for the
cultivation of gonococci (Deutsche med. Woch-
enschrift, 1891, No. 50), but without result.
The blood serum came from a person who was
said to have passed through a severe attack of
measles seven years previously, and the authors
argue that there are special advantages in
obtaining this nutrient medium from the blood
of persons who have never had an attack of
measles, and have, therefore, not acquired
more or less immunity against that disease.

Canon and Pielicke concluded by stating
that the bacilli found by them in the blood of
patients suffering from measles are essentially
different from the micro-organism hitherto
described in connection with that disease.
They admit, however, that Babes’s "bacilles
très courts," which he does not further describe,
may be indentical with theirs, but he only
mentions having found them once, and seems
to have attached no importance to the matter.

British Medical Journal.

Psoriasis and the New Remedy, Gallac-
etophenone.—(Julia W. Carpenter, M. D.)
A. H., aged seventeen, first came under
my care three years ago. The trouble was
psoriasis guttata, appearing chiefly on the
face, chest, arms, and from the knees to the
ankles. This eruption he had been troubled
with since childhood, and he had had the best
advice and care of some of our prominent
physicians.

During the three years that he has been un-
der my supervision, he would improve under
treatment, remain well a few months, and then
have a relapse, as is usual in such cases. I
never pushed the arsenic treatment, as it does
not prevent relapses.

The best results were obtained by the exter-
nal application of a solution of salicylic acid in
alcohol, about fifteen grains to the ounce.

At the time of one of the worst attacks, I
used the faradic current. As this disease is
thought to be a neurosis, I thought it worth
while to try the efficacy of electricity in the
absence of something better, although I could
not find any reference to its use in this disease.

It was applied on the back of the neck and the
forearms. There was an immediate and great
improvement. With its use at a subsequent
attack the improvement was not so great.

In the N. Y. Medical Journal, of February
6, 1892, there appeared an article by Dr.
Hermann Goldenberg on the efficacy of this
new remedy in psoriasis. He stated that he
had used it since the middle of last October
in thirty cases of skin diseases, twelve of which
were psoriasis, and that the good effects were
seen in twelve hours. The results, as described
in those twelve cases, were so surprisingly good
that I sent at once for the remedy, and used it
as stated in the article, namely, a ten-per-cent
ointment, applied twice daily. The good effect
was immediate, the scales disappearing in two
or three days, the redness gradually fading,
and the skin taking on a normal appearance.

No other remedy in this case has had a
similar effect, and this one case is reported
simply because it accords with the many cases
reported in New York and abroad.

Gallacetophenone is scarcely soluble in cold
water, but is soluble in hot water, alcohol, ether
and glycerin. As it does not discolor the hair,
it can be used in psoriasis of the scalp. That
it is perfectly harmless has been proved by
experiment on animals.

It is prepared from pyrogallic acid, and its
resemblance to pyrogallic acid suggested its
use in psoriasis. Its chemical formula is:

\[
CH_3
\begin{array}{c}
| \CO \\
| C_8 H_7 OH \end{array} \quad CH_4 COC_6 H_4 (OH) \end{array}
\]

It is pyrogallic acid in which CH_3O are
substituted for H.—Cincinnati Lancet Clinic,
April 30th.

Leprosy in Japan.—Another missionary
who devoted himself to the succor of lepers
has just completed his sacrifice by giving his
life in their service. Father Testevuide, who
may be called the Damien of Japan, estab-
lished the first leper house in that country in
1886. At that time no provision whatever
was made either by the government or the pub-
lic for the care of lepers, and it was only by
the most persevering efforts that the energetic
priest was able to collect sufficient funds to
build the leper house on Mount Fusi. This
institution he personally managed till his
death. His example has been fruitful, and
now there are three asylums for the victims of
leprosy in Japan, all apparently owing their
existence to private charity.—British Medical
Journal.
THE AMERICAN PRACTITIONER AND NEWS.

The American Practitioner and News

"NEC TENUI PENNA."

Vol. 13. SATURDAY, JUNE 18, 1892. No. 13

D. W. YANDELL, M. D., Editor.
H. A. COTTLE, M. D., Editor.

A Journal of Medicine and Surgery, published every other Saturday. Price $3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

Books for review, and all communications relating to the columns of the journal, should be addressed to the Editors of the American Practitioner and News, Louisville, Ky.

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THE AMERICAN MEDICAL ASSOCIATION.

The forty-third annual meeting of this Association was held in Detroit, June 7th, 8th, 9th, and 10th. The attendance was above the common mark, something better than eleven hundred doctors having graced the session with their presence. The scientific work was also better than common. Many papers were read, and more than a few of them are substantial contributions to medicine and surgery.

The first session opened with an address by General R. A. Alger, the well-known presidential possibility. This was followed by the report of the Committee of Arrangements and the address of the President, Dr. H. O. Marcy, of Boston. His theme was Evolution in Medicine. It was an able, learned, and well-constructed essay, and will be read by everybody who has the interest of medicine at heart. The address in General Medicine was delivered by Albert S. Gilson, M. D., U. S. A., the subject being Intellectual Progress in Medicine. Dr. John B. Hamilton delivered the annual address in Surgery, and Dr. J. Berrien Lindsley, the address on State Medicine. These addresses, as the names of the authors would pre-warrant, were splendid testimonials to the high development and efficiency of American Medicine.

The work in the Sections was very full, and such as to give the Association a better scientific standing than it has had in some of the more recent years past.

A good number of office-seekers was on hand; but their maneuvers were not such as to prejudice the scientific work of the body. The only political feature of consequence was a contest over the membership of Dr. W. W. Potter, of Buffalo, N. Y., who, while a permanent member of the American Medical Association, and a trustee of its journal, is also a member of the New Code New York Medical Society. The Judicial Committee reported that, according to the organic law of the American Medical Association, Dr. Potter was not entitled to membership in it. A motion was made by Dr. Gihon to table the report; but this was lost because the constitution gives the Judicial Council absolute power in the premises, and their finding is final. "A committee of five was then appointed to confer with committees of five each from the New York Medical Society (new code) and the New York Medical Association (old code) to discuss and to arrange all differences between them." A committee was also appointed to revise the "Code of Ethics."

It would be wise for the Association to take some steps in the way of repressing the seemingly irrepressible conflict between the profession at large and the so-called new code men of New York. That this code difference keeps out of the National Association some of the greatest men in the country can not be denied; but how these magnates in the country can not be denied; but how these magnates are to be brought to the Association without stultification it is not easy to see. We trust the committee may be able to find some satisfactory solution of the problem, but we do not believe that any code which forbids consultation with irregulars will placate the disgruntled seceders.

The delegates were received most royally by the city authorities, and made happy by every proper appliance and device for the successful entertainment of guests. The next place of meeting is Milwaukee, Indianapolis and Chicago contesting for the honor.

The officers for the ensuing year are: Dr. Hunter McGuire, of Richmond, Va., President; Dr. H. O. Walker, of Detroit, First Vice-President; Dr. H. Brown, of Kentucky,
Second Vice President; Dr. Jesse Hawes, of Colorado, Fourth Vice-President; Dr. R. J. Dunglison, of Philadelphia, Treasurer; Dr. W. B. Atkinson, of Philadelphia, Secretary; Dr. Montgomery, Assistant Secretary; Dr. G. W. Webster, of Chicago, Librarian.

The following were elected to fill vacancies on the Board of Trustees of the Association: Dr. Alonzo Garcelon, Lewiston, Me.; Dr. LeRoiaon Connor, Detroit; Dr. Perry H. Millard, of Minnesota, and Dr. Patterson, of Washington.

The members of the Judicial Council are: Dr. N. S. Davis, of Chicago, Dr. John Morris, of Baltimore, Dr. H. D. Didima, of New York, Dr. John B. Roberts, of Philadelphia, Dr. A. M. Emmert, of Iowa, Dr. W. T. Briggs, of Nashville, Tenn., Dr. C. W. Vorhees, of Coldwater, Mich., Dr. W. E. B. Davis, of Rome, Ga., Dr. A. Morgan Cartledge, of Louisville.

THE KENTUCKY STATE MEDICAL SOCIETY.

In this issue appears the last of this Society's proceedings for 1892 so far as the discussion of papers is concerned. All papers which called forth comment have been given the precedence in issue, and while the number of these is large, a larger number lie pigeon-holed for publication, and will be issued as fast as we can find space for them. The extra scientific portion of the proceedings, or the "minutes," for the most part pertain to matters relative to the successful working of the thirty-seventh session, and therefore for the most part are without general interest. Such items as do not come under the above ruling we here present.

The Permanent Secretary, Dr. Steele Bailey, made the following report:

According to custom, your Secretary takes pleasure in presenting the Thirty-seventh Annual Report of this Society.

It is quite manifest that the medical profession of Kentucky is thoroughly modern in its medical ideas, and that it comes to the annual gatherings prepared for a vast amount of admirable work.

The year of grace 1892 will not be an exception. On this occasion the members have furnished material for a programme which is very attractive, and the peer in excellence and versatility of any furnished by sister State Medical Associations.

Progressive scientific investigation is being pursued all along the line. Fellows vying with each other in the amount of hard work.

So far as the labor in this office is concerned, I may say it has been ample. The responsibility is great: there is required some ability and right much industry and tact; however, the work is fascinating; I like it, and trust its performance this season will compare favorably with other years.

I have been exercising every talent so as to carry into effect the resolution adopted at Lexington in May last, the spirit and letter of which is to resume the publication of the Annual Volume of Transactions.

As we have been lying fallow since 1877—in which year the Society deemed it prudent and wise to cease its publication and substitute for the Volume the printed Minutes, which have been distributed faithfully after each stated meeting—but are now up with the procession, marching to the music of Progress, with which every State in the Union and the Territories are keeping step—your Secretary would submit the fact that we can not be indifferent to the contents of the Transactions; we must compare favorably with the very best. To afford the Committee of Publications also, your assistance greatly; the matter is to print as early as possible, copies of papers should be submitted to the Secretary as soon as read, or shortly thereafter; in this way no delay will be had in the publication of the proceedings.

The resolution of Dr. McMurty reads as follows:

"I move that a Committee on Publication be appointed at this meeting to restore the annual volume of Transactions, incorporating the reports and papers read and the discussions on the same, the latter to be revised by the authors preparatory to their publication. In order to meet the expense of the publication of the annual volume of Transactions it is necessary to raise the annual dues slightly; the matter of publishing the papers in the Transactions does not prevent authors from furnishing copies of their papers to reputable medical journals; but the original manuscript should be handed over to the Permanent Secretary as soon as read, or shortly thereafter."

Our membership, which now numbers 400, and the treasury upon a strong financial basis, will permit this innovation; besides, it puts us upon a plane with other State organizations and abreast of the times.

Another matter of moment, and one I hesitate to record, is that several members are in arrears for dues, which no amount of persuasion will induce them to remove. Graciously carrying them for years, and our efforts to get them to liquidate being unavailing, we will not longer violate Article IV, but drop them from the roll and underscore them on the ledger with red ink as "delinquents," having forfeited their membership for non-payment of dues.

I trust it will not be forgotten that after each member has received receipt for his dues, that he will write his name and address legibly upon the Society Register, as in this way only can the Secretary complete the record of attendance, which he desires to print in the proceedings.

I would respectfully request, because of some confusion with the necrological list, that upon the death of a member the fact be at once communicated to the Secretary. The necessity of this is patent to every one.

A tabulated statement of my account is herewith appended:

Expenditures: Furnishing stamps, envelopes, postal cards, in fact the postage for Secretary's office during the current year, amounting to $14.75

Paid expressage, books, Society Transactions, etc. 3.50

Telegramus 1.25

$19.50
Dr. Kinnaird, the Treasurer, set forth the Society's financial status as follows:

We are gratified to report that the treasury of the Society is in better condition to-day than it has been for many years. The increased membership has been an advantage financially. Greater interest is manifested by the members, and we hope the day will soon arrive when it will not be necessary to ask the delinquents to settle their dues, but it will be considered a privilege to contribute toward the great work that is being done by our Society.

Delinquents are notified that their names will be dropped from the roster unless they settle with the Treasurer. There exists a misapprehension in the minds of some members that they are not required to pay their dues unless in attendance. We would urge the members of the Society to settle promptly in order that there may be no trouble and delay in publishing the Transactions of the Society.

At the meeting at Lexington in May, 1891, it was resolved to resume the publication of the Transactions, the expense, therefore, will be increased, and to meet the expenditures the dues were advanced to the original rate—$3 per annum.

Collections at Lexington meeting...$405 00
Dues from delinquents........... 28 00—$433 00

Disbursed as follows:
Secretary's salary..................$100 00
Secretary's incidentals........... 17 75
J. P. Morton & Co............... 34 55
Stenographer.................... 43 40
Printing proceedings............... 43 00
"Central Record" printing....... 4 00
Postage—Treasurer................ 1 65—$244 75

Balance in treasury ............. $188 25

JAMES B. KINNAIRD,
Treasurer.

Dr. J. N. McCormack, of Bowling Green, offered the following resolution:

Resolved, That a committee of five be appointed by the Chair to report to the next annual meeting a plan for organizing a medical society in each county in the State as auxiliary to this Society, and so ordered that members of county societies as such shall become members of the State Society.

The resolution was adopted.

The President called attention to the resolution introduced by Dr. J. H. Letcher, of Henderson, last year, it being an amendment to the Constitution, Section 2, Article 4. (See page 10 printed minutes.)

Dr. John A. Larrabee, of Louisville, introduced the following resolutions:

Whereas, We recognize in the establishment of a National Bureau of Public Health a strong and efficient safeguard against the prevalence of epidemic diseases to which the laxity of our immigration laws renders the public liable; and

Whereas, A bill to create a Cabinet Officer of Public Health is now pending before the Congress of the United States; therefore be it

Resolved, That we, the members of the Kentucky State Medical Society, in convention assembled, do hereby heartily indorse the aforesaid bill, and do hereby request our Representatives in the Congress of the United States to use every legitimate means to secure its adoption.

Resolved, That a copy of these resolutions be printed and forwarded to our Representatives in Congress as expressing the desires of their constituents.

Unanimously adopted.

The Committee on Credentials through its Chairman, Dr. A. M. Vance, of Louisville, recommended seventy-nine candidates for membership, all of whom were duly elected.

Dr. Lyman Beecher Todd, of Lexington, paid eloquent tribute to the character and life work of his fellow-townsmen, the venerable Dr. Robert Peter, Emeritus Professor of Science and Chemistry in the State College of Kentucky, and the only surviving member of the first faculty of the Kentucky School of Medicine. Dr. Peter, though now eighty-four years old, pursues his scientific work with the ardor of young manhood. His eminently useful life, his advanced age, and the fact that he is a charter member of the Kentucky State Medical Society, entitle him to the special consideration of the Fellows. The sentiments and suggestions of Dr. Todd were embalmed in an appropriate resolution, which passed by a unanimous rising vote.

Dr. J. Letcher, of Henderson, said that the resolution relative to the election of officers offered by him at the Society's meeting two years ago, and which was carried almost unanimously last year at Lexington, needed some alteration. He therefore proposed the following amendment:

Resolved, That each officer shall be elected after recommendation by the Nominating Committee, which committee shall be made as follows: Immediately after the close of the first session of the Society on the second day, at each annual meeting, members present shall organize themselves into eleven conventions, according to the Congressional districts, all members present from the First Congressional district constituting one convention, and so on for the eleven districts, each convention to elect one member of the Nominating Committee, except the convention of the Fifth Congressional district (in which is situated the city of Louisville), which shall elect two members. The chairman of each convention to report their members at the next session, the President then to appoint the thirtieth, he to be the chairman of the committee. The election shall take place at the same annual meeting of the Society, on the second day of the session, after reading the proceedings of the previous day, and each officer shall serve for one year, or until another is elected to succeed him.

On motion the amendment was accepted.
Dr. J. N. McCormack offered the following resolution:

Resolved, That the Kentucky State Medical Society warmly endorses the American Medical College Association in its efforts for a higher and more thorough system of education in the medical colleges throughout this country, including better preliminary education before matriculation and attendance upon a three years’ course of lectures as a requirement for graduation, and the Society pledges its support to our own schools in their efforts to forward this movement.

Dr. Wathen said that on behalf of the medical institutions of Louisville he was pleased to second the resolution; that the Secretary of the State Board of Health of Kentucky had done much to dignify medical education and medical practice, and to elevate the standard of requirements of medical colleges. The medical colleges of Louisville were in accord with the views expressed in the resolution.

The resolution was adopted.

Dr. A. D. Price, Chairman of the Nominating Committee, named the officers for the ensuing year:

President—Dr. Arch Dixon, Henderson.
First Vice-President—Dr. T. B. Greenley, Orell.
Second Vice-President—Dr. Turner Anderson, Louisville.
Treasurer—Dr. J. R. Kinnard, Lancaster.
Permanent Secretary—Dr. Steele Bailey, Stanford.
Board of Censors—Drs. B. W. Stone, Hopkinsville; W. L. Rodman, Louisville, and J. Smith, Hodgenville.
Place of Meeting—Frankfort; time, second Wednesday in May, 1893.
Chairman of Committee of Arrangements—Dr. E. E. Hume.

The report of the Committee was adopted.

The President-elect being escorted to the chair, said: "Mr. President and Gentlemen of the Kentucky State Medical Society: There is not a man in the medical profession in Kentucky that would not feel proud of being elected to preside over the deliberations of this body. I am profoundly grateful for the honor you have conferred upon me, and I pledge myself to promote the interests of the Society."

Dr. H. K. Adamson, of Maysville, offered the following resolution, which was seconded and adopted:

Resolved, That the Kentucky State Medical Society heartily endorses the efforts of the State Board of Health to enforce the laws regulating the practice of medicine in this State, and to rid the people of the evils of charlatanism.

Dr. W. L. Rodman, of Louisville, offered the following resolution, which was adopted:

Resolved, That the Kentucky State Medical Society being deeply in sympathy with the movement to erect a monument in memory of Dr. Samuel D. Gross, we hereby most earnestly recommend that every physician in this State contribute such sum or sums of money as to them may seem best, and that such contribution be sent at as early a date as possible to Dr. D. W. Yandell, of Louisville, or John B. Roberts, of Philadelphia.

The President appointed Dr. Rodman a special committee to solicit subscriptions.

Secretary Bailey read the following resolution, which was seconded by Dr. Larabee and adopted:

Whereas, A movement has been inaugurated by the American Medical Association to unify the medical profession of the Western Hemisphere by the organization of the Pan-American Medical Congress to be held in the city of Washington, in September, 1893, therefore

Resolved, That the Kentucky State Medical Society hereby cordially approves of the objects and purposes of said Pan-American Medical Congress, and recommends that the members of this Society and the profession of Kentucky render all practicable support to the said Congress.

Resolved, That the President of the Kentucky State Medical Society be and is hereby instructed to appoint a committee of three members to cooperate with the Committee on Permanent Organization of the Pan-American Medical Congress.

The President appointed on this committee, Dr. L. S. McMurtry, chairman, Dr. David Barrow, and Dr. J. G. Brooks.

Dr. John A. Ouchterlony, Chairman of the Committee on the Marvin Prize Essay, reported in favor of awarding the prize to a contestant whose nom de plume was "Medicus."

The report being approved, the seals of the envelopes containing the real names of the contestants were broken, when the successful candidate was found to be Dr. Simon Flexner, formerly of Louisville, but now Fellow in Pathology in Johns Hopkins University, Baltimore. The title of the paper is Some Studies in Croupous Pneumonia.

Dr. L. S. McMurtry, of Louisville, offered the following:

Resolved, That the Constitution be so changed as to abolish all standing committees, and that in lieu thereof the Chair at the next meeting appoint a committee to select and arrange papers on medical, surgical, obstetrical, and gynecological subjects, and also gentlemen to lead in the discussions on the various papers presented.

The resolution was seconded by Dr. Vance. (To lie over for one year.)

The Secretary then read the following list
of appointments of Committees as made by the President for the ensuing year:

Report on Tumors—W. L. Rodman, Louisville.
The Dangers of Anesthesia and How to Avoid Them—Frank C. Wilson, Louisville.
Diseases of the Rectum—W. O. Green, Louisville.
Materia Medica—George M. Reddish, Somerset.
Diseases of the Mind and Nervous System—Curran Pope, Louisville.
Laryngology—A. L. Butt, Franklin.
Dermatology—H. K. Adamson, Maysville.
Brain Surgery—H. P. Cartwright, Bowling Green.
Otology—T. E. Evans, Louisville.
Epidemics—A. D. Price, Harrodsburg.
Diseases of Children—John A. Larrabee, Louisville.
Cholera Infantum—Lyman Beecher Todd, Lexington.
Medical Ethics—H. J. Cowan, Danville.
Bacteriology—Louis Frank, Louisville.
Committee on Publication—L. S. McMurtry, Chairman, John G. Cecil, John A. Larrabee, and J. B. Marvin.
Abdominal and Pelvic Surgery—W. C. Dugan, Louisville.

Notes and Queries.

The Flesh of Diseased Cattle.—No idea can be formed of the amount of flesh of animals, which have died or been killed because of disease, that finds its way into the market as human food. There can scarcely be a doubt that thousands, perhaps tens of thousands, of cattle, sheep, and pigs are bought by the less reputable butcher or the “dropped meat salesman,” and prepared by them for consumption, the beasts being at the time of purchase hopelessly ill or already dead. A great traffic must be going on in such flesh, as the carcases are rarely buried, and inquiries at the knackerries tend to prove that they very rarely find their way to these establishments. It is generally the custom for the owners of sick animals to send for the butcher to take them away either dead or alive, and probably after they have received a large quantity of drugs, some of these being, perhaps, of a poisonous description. What becomes of the carcases we can only surmise, but that they are dressed and exposed for sale can scarcely admit of a doubt; indeed, it is a moral certainty to which veterinary surgeons and others could testify. Even in the ordinary slaughter-houses diseased animals can often be seen either before or after death, and the fact of their flesh being refused sale is never heard of. The butchers could tell some startling stories with regard to this matter if they cared to do so; but every thing is kept dark respecting it, and it is only at rare intervals that a chance discovery is made of some carcase that should have been buried being found either in transit to the meat market or actually exposed for sale on the butcher’s stall.

The slaughter-houses are private places where any thing may be done in the way of dressing up diseased carcases without much fear of detection, either there or afterward; and there is only too much reason to apprehend that great cruelty to animals is inflicted at times in such obscure places. The only remedy appears to be the introduction of public abattoirs whenever possible, and, where these can not be established, the institution of a system of thorough inspection of the private slaughter-houses. There should also be some means of preventing the carcases of animals that have died from disease, or been killed on the owners’ premises because of illness, from finding their way into the meat market, unless certified by some competent person as fit for human consumption. For it must be remembered that in the great majority of instances such flesh must be not only of poor quality, but possibly absolutely dangerous either from its own special poisonous properties or because of the drugs which may have been administered before death. When the carcases have once been dressed by a cunning butcher—as men who engage themselves in such a business usually are—it is very difficult indeed to detect any thing amiss with them by even a moderately skilled person, and they therefore escape notice as a rule. Veterinary surgeons, especially those in country practice, could do much in restraining this nefarious trade of the “dropped-meat” salesman; but a wide-ranging and systematic inspection of slaughter-houses and meat is the only sure safeguard for the public health. Of the prevalence of disease, parasitic and other, among animals whose flesh
is consumed by man, we have ample evidence in the reports published periodically by the continental public abattoirs, and there is no reason to expect that such disorders are less extensive in this country; while added to these we have the secret disorders, such as puerperal fever, anthrax, tuberculosis, swine plague, etc., which are not in evidence in these establishments, with the exception of tuberculosis, animals which are so affected, but are in good or fair condition, being often sent there for slaughter.—London Lancet.

Tobacco-Smoking Among Boys.—As long as the habit of tobacco smoking remains a common practice among men, so long may we expect that the boyhood of the time will acknowledge its fascination. It is therefore in a sense as natural as it is morbid that the soothing weed should be numbered among the mischievous absurdities of growing youth. This is much to be regretted for several reasons. Constitutionally the boy is not even a lesser man. Between his young and vigorous nervous system and that of the male adult there is this essential difference—the one is developing, the other formed. Endowed with greater elasticity, the former is also in proportion less stable, and such effects as the narcosis of tobacco can not at all assist, but must more or less pervert, its normal activity. The man’s more settled nerves are less affected. Then with boys the smoking habit is, in its way, a first love, and as such is almost certain to be indulged to excess. The circulatory and nerve structures are overworked in consequence, digestion suffers, and, whatever may survive of physical energy, we have often to note a decrease in constitutional soundness. Influenced, no doubt, by such reasons as these, and others of more general and social significance, the medical faculty of Manchester, in reply to a circular issued by the Anti-Tobacco League, have set themselves to seek a mitigation of the foolish evil. Their recommendations follow much the same line as that adopted by the Manchester Conference a year ago, in advising the suppression by law of smoking among boys under sixteen years of age. The well-known example of Germany in this matter is worthy of general imitation. In the State law of New York boys under the said age are forbidden to smoke in public.—Ibid.

Sex and Music.—Sir J. Crichton-Browne’s oration before the Medical Society has been read with interest far beyond the circle to which it was immediately addressed, having penetrated to quarters usually impervious to physiological enlightenment and hygienic monstrosity. No need, therefore, to apologize for returning to it, charged as it is with an educational value which re-discussion will be found to strengthen, certainly not to impair. Even before the differences between the sexes in cerebral structure and function were so scientifically demonstrable as now, there were practical tests in the sphere of education itself which pointed irresistibly to the conclusion arrived at by the medical orator. Take, for instance, the art of music. There is no room here for the contention that, as compared with the boy, the girl has not had fair play—that opportunities for cultivating the art have in her case been few, in his case many. The reverse is the truth. If there is a branch of education in which girls have been schooled to the neglect of every other, it is precisely that of music. It is among the primary subjects to which she is put, and among the very last she is allowed to leave off. Not one hour a day, but many hours out of the twenty four are consumed by her at the piano, to say nothing of other instruments, while singing lessons are usually given in supplement to these. It might have been thought that if practice gives perfection, woman would have excelled her male counterpart not only as an executant but as a composer. But what are the facts? In instrumental performance she can not for a moment compare with him, while as to composition she is nowhere. The repertory of music from the dawn of the art to the present day owes simply nothing to her. Considering the time she has spent over it, her failure to evolve new harmonies or even new melodies is one of the most extraordinary enigmas in the history of the fine arts. It has been remarked, but never explained, by such accomplished esthetic writers as Lady Eastlake in her celebrated essay on “Music,” and by such keen psychological analysts as Mr.
G. H. Lewes, in his "Life of Goethe," it is, indeed, a problem still awaiting solution, unless we can solve it by an appeal to such facts as Sir J. Crichton-Browne adduced in his recent oration—the inferiority of woman to man in the cerebral substratum of ideo-motor energy.

Why, with such a record of "no results"—so far, at least, as the production of a female Handel or Beethoven or even of a female Glück or Bellini is concerned—music should usurp such a preponderant place in girls' education it is difficult to divine. We have seen the practice defended on the same grounds on which in our classical schools the writing of Greek and Latin verse is vindicated: a finer appreciation is thus attained, in the girls' case, of musical excellence, in the boys' of the Hellenic and Latin master-pieces. "Tis better to have tried and failed than never to have tried at all," while failure gives a truer sense of what perfection consists in. Such is the argument—for what it is worth. But even on this analogy the boy sometimes succeeds where the girl invariably fails. In George Buchanan, John Milton, Arthur Johnson, Joseph Addison, Vincent Bourne, Thomas Gray, to say nothing of the late Marquis Wellesley and Benjamin Hall Kennedy, we have classical poets hardly inferior to any but the best of antiquity; but where, in ancient times or in modern, can woman, with all her practice, be found to have created one chef-d'œuvre in music? The inference implied by the negative answer to such a question seems simply this: that in the higher efforts of mind (even in those where the admixture of an emotional element, as in music, might be supposed to give her the advantage) woman is inferior to her male counterpart, and can not by any educational forcing system be made to equal him, deficient as she is in the physiological conditions of ideo-plastic power.—Ibid.

Infanticide Unlimited.—The records of infanticide in this country have revealed nothing which will equal in methodical and callous wickedness the disclosures recently made in a Russian court of law. The history of a trial which has just reached its close at Vilna states that eleven persons have been charged and seven convicted of the deliberate murder, or complicity in the murder, of at least sixty-five infants. These children evidently belonged to the "unwanted" class. Many of them appear to have perished merely from wanton exposure and neglect. Others were poisoned, drowned, strangled, or otherwise suffocated. The case almost, though as we shall see, not quite, unique in its multiplied barbarity, is in several ways deserving of particular note. The motive was obviously that of gain. Murder was adopted merely as a means of livelihood. Its plan followed no regular indications, but was covert or open, violent or subtle, as circumstances might seem to require. It is remarkable, however, that its perpetrators appear to have acted with singular want of caution, as if liable to no great risk of detection.

It has been stated that they were persons of Jewish extraction, though whether this assertion can be substantiated we are unable to say. It recalls what we have always regarded as a slander of the middle ages, and one which is utterly out of keeping with the ordinary character of the Jews—a people essentially law-abiding and particularly averse to crimes of violence. Their accusation in this case may possibly prove to be only another instance of myth created by racial prejudice. However this may be, the commission of a series of aggravated crimes with so little precaution, taken along with a like precedent reported a couple of years ago (The Lancet November 22, 1890), can not but suggest a doubt as to the efficiency of executive authorities. Such would be its certain consequence in this country, and probably in Russia also. Notwithstanding the vastness of that empire, decentralization is not a strong point in its system of government. A question naturally arises whether this principle should not be more freely applied, due regard being had to its orderly administration. By this means, aided by special provisions which would not be superfluous in the law of any country, such monstrous excesses of crime as those above described would become practically impossible.—Ibid.

The Michigan State Medical Society, at its late meeting in Flint, unanimously adopted resolutions urging Congress to pass the bill creating a Cabinet Officer of Public Health.
Army and Navy Medical Intelligence.

OFFICIAL LIST OF CHANGES in the Stations and Duties of Officers serving in the Medical Department, U. S. Army, from May 22, 1892, to June 11, 1892.

Upon the return of Captain Benjamin Munday, assistant surgeon, to Fort Sully, S. D., First Lieutenant Allen M. Smith, assistant surgeon, will proceed without delay to Fort Yellowstone, Wyoming, and report to the commanding officer for temporary duty with troops in the National Park during the season.

Captain Henry S. Tarrill, assistant surgeon, U. S. Army, granted leave of absence for three months.

Captain Aug. A. De Laffre, assistant surgeon, U. S. Army, the leave of absence on surgeon's certificate of disability, granted in S. O. 93, A. G. O., April 20th, is extended one month on surgeon's certificate of disability.

APPOINTMENT.—To be Chief of the Record and Pension Office of the War Department, with the rank of Colonel, in accord with the act of May 9, 1892, Major Fred C. Alseworth, surgeon, May 27, 1892, to fill an original vacancy.

SPECIAL APPOINTMENT.—Colonel Fred C. Alseworth, Chief of the Record and Pension Office, his commission as surgeon, with the rank of Major, June 1, 1892.

Leave of absence for four months, to take effect after June 30, 1892, is granted Colonel Anthony Heger, surgeon, U. S. Army.

The following assignments to duty of assistant surgeons, U. S. Army, recently appointed, are ordered: First Lieutenant Champe C. McCulloch, Jr., will proceed from Charlottesville, Va., to Fort Sam Houston, Tex., and report in person to the commanding officer of that post for duty.

First Lieutenant Frederick P. Reynolds will proceed from Elmina, N. Y., to Fort Monroe, Va., and report in person to the commanding officer of that post for duty.

First Lieutenant Isaac P. Ware, will proceed from North Anson, Me., to Fort Douglas, Utah Ter., and report in person to the commanding officer of that post for duty.

First Lieutenant Robert S. Woodson, now at Fort McPherson, Ga., will report in person to the commanding officer of that post for duty.

First Lieutenant Madison M. Brewer is relieved from temporary duty in the Surgeon General's Office, Washington, D. C., and will proceed to David's Island, N. Y., and report in person to the commanding officer of that post for duty.

First Lieutenant George D. Deshon, now at Columbus Barracks, Ohio, will report in person to the commanding officer of that post for duty.

First Lieutenant Samuel R. Dunlap, assistant surgeon, U. S. Army, is relieved from duty at Fort Supply, Indian Territory, and will report in person to the commanding officer, Camp Pena, Colorado, Texas, for duty at that station, relieving Major John O. Skinner, surgeon, U. S. Army.

Major Skinner, upon being relieved by First Lieutenant Dunlap, will rejoin his proper station, Fort Clark, Texas.

Captain William B. Davis, assistant surgeon, is relieved from duty at Fort Clark, Texas, to take effect upon the return of Major Skinner to that post, and will report in person to the commanding officer, Fort Sam Houston, Texas, for duty.

Major Edward B. Moseley, surgeon, is relieved from duty at Fort Sam Houston, Texas, to take effect upon the arrival at that post of Captain Davis, and will report in person to the attending surgeon, Washington, D. C., for duty in his office.

SPECIAL NOTICES.

I CONSIDER Caetina Pillets a most valuable remedy in the irritable heart of smokers.


Chemical Food is a mixture of Phosphoric Acid and Phosphates, the value of which physicians seem to have lost sight of to some extent in the past few years. The Robinson-Pettet Co., to whose advertisement in this journal we refer our readers, have placed upon the market a much improved form of this compound, "Robinson's Phosphoric Elixir." Its superiority consists in its uniform composition and high degree of palatability.

N. A. SACKETT, Ewing, Neb., says: Celerina I have tested in two cases of nervous headache. One case was that of a man about thirty-five years of age, who has been subject to attacks for a number of years as often as every two weeks. I prescribed an ounce in two ounces of port wine, to take a teaspoonful four times a day. He has not had an attack since, although two months have elapsed. The other was a lady of about the same age, who has had similar attacks for the last five years. She has had no recurrence of the trouble since, and, moreover, she has passed two monthly periods without the usual dysmenorrhea with which she is afflicted at that period. I shall continue to prescribe it in cases in which it is indicated, and will report more fully in future.

CHRONIC BRONCHITIS.

R. Tinct. nucis vom. .................. 1 dram;
Tinct. sagginariae .................... 1 dram;
Kennedy's ext. pinus can. (dark) ............... 1 dram;
Syrup. simp. ......................... 4 oz.

Of this a dram should be taken every four hours.

W. C. JOHNS, M. D., Yorktown, Ill., says: Have found that S. H. Kennedy's Extract of Pinus Canadensis is a remedy of superior excellence in gonorrhea. It seems to be a true specific. I first used it in a case which had withstood the action of our most popular remedies. Immediate relief and cure followed from the local use of S. H. Kennedy's Extract of White Pines Canadensis.

CHRONIC NASAL CATARRH.

R. Creasote (beech bark) ......... 2 minims;
Glycerine conc. ............ ¼ dram;
Kennedy's ext. pinus can. (dark) .......... ¼ dram.

M. Cleanse both the nostrils out thoroughly with warm rain-water and pure sweet milk, equal parts, with a small quantity of table salt dissolved therein; after which apply to the inside of the nostril the above mixture, requesting the patient to sniffle sufficiently strong to give him a ereticistic taste to the mouth.
Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—Ruskin.

Original Articles.

THE PROGRESS OF SURGERY: A REPORT.*

BY A. M. CARTLEDGE, M. D.
Professor of Surgery, Louisville Medical College.

Your reporter upon the progress of surgery during the past year finds, no doubt like his predecessors, that greater difficulties beset the way of one who writes from such an abundance of subject-matter than when the field is more restricted. As I understand my reportorial relation to this Society, it is to record the more important advances in the development of general surgery, or, more accurately, the principles of surgery and surgical pathology. The ever-extending tendency to subdivision in surgical practice has necessitated separate reports in the special departments of this branch.

The subject of antisepsis, its relation to surgical practice, and the progress in this branch of surgical principles seems to me of first importance; and you will pardon me if I devote my remarks to this phase of surgical progress alone, leaving other things for the reporters in special departments.

It occurs to me that in the perfection of antiseptic detail we are permitting the pendulum to sway too far toward that ideal application of the antiseptic principle we are pleased to call asepsis. No one will question our right to progressive improvement, but as antiseptic and aseptic surgeons we believe firmly in the doctrine that perfect asepsis is only attainable by a thorough familiarity with the Listerian creed, and an unshaken belief in all of its principles.

From a thorough appreciation of the principles of antisepsis a child was born, and it was called "Asepsis." The child has ever since essayed to be more wise than its parent, and to its lasting discredit has ever disowned its progenitor. Faithful to the noble instincts of paternity, antisepsis has acknowledged and applauded the virtues, nay, total competency of its offspring to meet the requirements of its function in the great healing art, but is not willing to be cast off as a distinct quantity, an ancient delusion without credit for the traits of its child. In fact, the candid observer, the unprejudiced student, and the man who has followed the battle from the earliest conception of Lister to the present time, knows that to antiseptic surgery is due aseptic surgery; one is the outgrowth of the other; they are both founded upon exactly the same principles, and only differ in the minor detail of practical application. Nay, more, this fact is so obvious that most modern surgeons would be loth to trust the asepsis of a man who did not believe in antisepsis. As a matter of fact, I take it that progressive surgeons the world over are practicing less and less the antiseptic detail and more and more asepsis, yet these same surgeons believe as strongly in the great principles underlying antiseptic surgery as they ever did. They have simply by practice perfected themselves in that most important principle of antisepsis, namely, to destroy the soil until they feel secure in many cases to trust to this precaution alone in securing the marvelous results of antiseptic surgery. Yet this is the quintessence from a logical standpoint of antisepsis, for it rests upon one of the fundamental laws as laid down by its father. If there is no soil, the seed falls upon a barren rock; there can be

*Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Society, May, 1892.
no growth. If there is no growth, there can be no fermentation; if no fermentation, no putrefaction; and if no putrefaction, no death. Every painstaking student of surgical pathology has nothing but respect for, if not agreement with, the men who claim that cleanliness is sufficient without the use of chemical agents to combat the deleterious influences of wound repair; but certainly the time has come when patience should not be extended to the belated minority who claim not to believe in the germ infection of wounds, and proclaim aloud that there is nothing in antisepsis, but that asepsis is all that is necessary. To all such we should say it is not surprising that a man who does not believe in the principles or reasons which underlie antiseptic practice should fail to get results. It is very surprising that a man should obtain successful results from aseptic methods alone if he does not believe in the principles of antisepsis, for the practice is nothing but an ideal perfection of the antiseptic method. Finally, we should be very loath to trust the cleanliness of a man who had no motive in being clean other than that it was "next to godliness."

As before stated, the tendency to prepare the soil for the undisturbed growth and development of new or regenerative tissue is the aim of the progressive surgeon. To this end the thorough sterilization of parts to be operated upon is of the greatest importance. In the antiseptic short-comings almost inseparable from a large general surgical practice, most of which is in private houses, and much of which is of an accidental character, I know of no one detail having such influence upon the future progress of the case as the thorough cleansing of the skin by razor, brush, and green soap.

The bacteriologist has taught us, and is still teaching us very much, yet the surgeon places these axioms in the crucible of practical experience and adds much to the valuable pointer of his brother worker, the bacteriologist.

Dr. William Welch, of Baltimore, has shown by a careful laboratory experiment, that the white staphylococcus, formerly classified as the staphylococcus pyogenes albus, is a constant resident of the deeper layers of the skin, and can not be destroyed by any means known to antiseptic practice. This has led to the method of introducing sutures beneath the skin by Dr. Halstead and others in order to avoid infection through the suture traversing a septic area. In the light of practice this seems unnecessary. I believe the experience of every observant surgeon is confirmatory of the statements of Dr. Welch in regard to this inaccessible dweller in the skin; however, with proper precautions the danger from this source is so small as not to be considered from a practical standpoint.

When I have stitch abscess, I am sure of one or two things, probably both: either the suture material was not safely prepared, or there was too great tension upon the suture. If these objections are eliminated and the skin prepared by first shaving, second scrubbing for ten minutes with green soap and brush, care being taken to see that the brush and hands are clean, then wash with sulphuric ether and afterward with mercuric solution 1 to 1,000, such a preparation done by one appreciative of the reasons for so doing will insure absolute safety so far as this branch of the detail is concerned; the exceptions being in the axilla, groin, anal region, scrotum, and soles of the feet. Here, if time permitted, use the green soap, poul'tice over night, or after thorough cleansing use the following solution upon absorbent cotton, covered with oil silk: Acid carbolie, 2 drams; glycerine, 2 ounces; water, 1 pint. To be applied locally.

For hand disinfection, much the same conditions obtain here as with the skin. Laboratory experiments demonstrate that the ordinary methods are inadequate for thorough sterilization of the hands of the operator and assistants. Yet practice proves the efficacy of carefully pared and cleaned nails, the hands being washed with soap and brush until close observation can not detect a suspicious-looking spot about the nails or crevices of the skin. The time necessary to do this will be from five to fifteen minutes, depending upon the difficulties. Now wash in sublimate 1 to 1,000 solution; and if done with due appreciation of the purpose to be accomplished—namely, ridding the hands of visible or invisible adherents inimical to wound repair—I am not afraid of the results.
*The American Practitioner and News.*

**Instruments.** Instruments are best treated by being sterilized in boiling water for half an hour. Silk should be boiled from half to one hour, then kept in absolute alcohol. There seems to be no valid reason why, with the improved methods of sterilizing catgut so safely, it should not be more generally adopted as a suture material. The silk-worm gut is easily disinfected by dipping in a 1 to 2,000 bichloride solution. It is strong, comparatively unirritating, and ties easily.

The improvement in wound treatment is nowhere so manifest as in the constantly-increasing tendency to dispense with artificial drainage. Drainage has ever been viewed as one of the necessary evils of wound treatment, and certainly when the day arrives that we can dispense with it the day of ideal wound treatment will have come.

Healing by blood clot, first mentioned by John Hunter, later by Lister, and finally perfected in recent times by Shede, has crowned the method of Lister with a final glory by reducing the open to the condition of a subcutaneous wound.

Environments, conditions, and individual training should always have the greatest bearing upon surgical methods in given cases, and what is the perfection of surgical art in the hands of one man is dangerous experimentation in the hands of another less trained and educated in the antiseptic details. I take it that the general surgeon, surrounded as he often is with the most unfavorable conditions, will ever have to observe the laws of drainage in recent wounds, and apply himself in many cases to the least harmful way of properly securing it. It does seem that the time for using rubber or hollow drain as a primary measure in aseptic wounds has passed. Certainly, where artificial drainage is required, catgut strands sewn in the most dependent recesses of the cavity answer every purpose. I do not think we use this now old method of drain enough.

Where drainage and hemostasis can be secured with one agent, I know of nothing which so commends itself as the gauze strip packed into the wound and removed in twenty-four or thirty-six hours. To this measure I attribute the lives of several patients, especially in abdominal work. This method of Mikulicz cannot be too highly praised.

**Irrigation.** To irrigate a recent wound in uninfected tissue is to admit that there is a breach somewhere in the previous detail of preparation, and it is better to correct this than to subject the tissues to the irrigation of solutions of mercuric bichloride; also avoid the use of water primarily, or at the time of redressing the wound so long as it is aseptic. The blood serum possessed of antiseptic properties is the great medium in which the leucocytes live, grow, and perform their life work of regenerating lost tissue. While water seems to be the especial liking of bacteria, it either destroys the leucocyte or so impairs its vehicle, the serum, as to greatly retard the process of repair in aseptic wounds.

As to external antiseptic applications to freshly closed wounds, iodoform still holds sway; aristol, dermatol, and iodol have all been praised, but surgeons seem loth to renounce the odoriferous yellow powder. This part of the technique would seem to be of the least importance, and it is probable we keep iodoform because our results are good—a very worthy reason.

**Dressings.** For dressing, gauze first and absorbent cotton second; these in the order named, or a combination of gauze first, and over this the cotton, constitute the almost exclusive material for dressing; the gauze should be impregnated with bichloride or iodoform, or both, as suits the fancy of the surgeon. As a result of an oftentimes troublesome dermatitis, after the use of sublimated gauze, I am more and more inclined to the plain gauze sterilized and impregnated slightly with iodoform. This for aseptic wounds. Occasionally the iodoform causes a severe dermatitis; I have observed this in only two cases out of many hundreds. I have never observed a symptom that could be referred to iodoform poisoning.

Experience teaches me that with our present improvements over Lister's original teachings in regard to the preparation of parts to be operated upon, and cleansing of hands and instruments, if we would take a step backward and adopt more constantly his original ideas (not methods) of thorough protection of the
wound, it would be a marked advantage. Success attained by perfection in other branches of antiseptic technique has emboldened surgeons to practice inefficient protection in many cases. An abundance of absorbent dressing well protected by plaster or crinoline in the extremities and rubber tissue elsewhere, should be used. If the sublimate or iodoform gauze is used, and these have been kept carefully protected, or have been recently prepared, I deem their sterilization unnecessary.

We should ever recollect that a perfect result from antisepsis can only come in every case from a perfect technique, and from a full appreciation of the motive of our methods. We should also, whenever indicated, bring to our assistance all other known means of accessory treatment favorable to repair by the first intention. Notable among these should be mentioned fixation and constitutional drainage. My observation leads me to believe that surgeons do not practice fixation enough in wounds of soft parts. Asepsis and antisepsis can do wonders, but their influence for good may be overcome when by irritation, such as motion, exudations are favored, and the conditions favorable for the growth and multiplication of bacteria that it is impossible to reach by any means are favored.

Alimentary Drainage. Whether the well-known disturbances of wound repair, that are so prone to occur when the bowels are constipated, are due to inactivity of the secretory and excretory glands, fecal toxemia, or entero sepsis, or to an excessive fluidity of the blood, I am not prepared to say. Dr. Roswell Park has dwelt entertainingly upon this phase of infection in his Mutter Series of lectures. He is inclined to attribute the great benefit of purgation as a preventive of sepsis in wounds to the stimulation of the liver and freeing the alimentary canal from septic material. While this is no doubt a factor in the action, I am inclined to believe that the chief benefit accrues by the attraction of serum, especially the watery elements of the blood, to the alimentary canal, thus placing the tissues in a better condition to combat deleterious agents to repair. That glandular activity is a powerful promoter of elimination no one will deny, and to this end the administration of a mercurial purgative commands itself.

It is my custom in severe lesions testing the antiseptic method in the extreme to pay the strictest attention to this detail. When done timely it will save the removal of many a dressing. A temperature which rises to 102° and even 103° F. upon the third day, and without preliminary chill, great pain, or unusual rise in pulse, is best relieved, nineteen times out of twenty, by doses of calomel, followed in six hours with a saline.

Fecal toxemia, like malaria, is a fertile source of anxiety to the young surgeon. It will cost him many a restless night for fear his wound has gone wrong, and that he should have removed the beautiful and perfect dressing, which he knows it is so desirable to keep undisturbed. To discriminate between the fever of systemic engorgement and fecal toxemia and that from wound fermentation is only possible after much experience; and the young surgeon had better err to the side of unnecessary removal of dressings than make the mistake of waiting until possibly irreparable damage has been done.

LOUISVILLE.

AN ALUMNI ADDRESS.*

BY T. C. EVANS, M. D.

Now that your honored faculty have completed their labors with you, and have passed you over to the Alumni Association for the finishing touches, allow me in behalf of this Association to congratulate you and bid you welcome. You have now, after considerable toil and great anxiety, successfully run the "Green Room gauntlet," have passed a creditable examination and have been honorably admitted into full fellowship in the profession of medicine. The next object of your ambition is to succeed, to attain at least to a position of prosperity and usefulness that will justify the confidence your friends have placed in your ability, and satisfy your instructors that they have not labored in vain.

 Doubtless you are all possessed of sufficient knowledge and skill in the science of medicine to deserve a practice, and of sufficient indus-

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* Delivered to the graduating class of The Hospital College of Medicine, Macaulay's Theatre, June 21, 1892.
try and integrity to attend to it faithfully and conscientiously. But these things, essential and indispensable as they are, do not constitute all of the practice of medicine. The degree of success to which you attain will depend almost entirely upon yourself, upon your tact, genius, and industry, and, most of all, upon your systematic, intelligent, and eternal perseverance, and not upon influential friends, opportunity, advantage, or circumstances. Even at this early age you can each perhaps recall many opportunities that have been neglected, advantages that you had over others who have already passed you on the way to fame and fortune, circumstances to which you did not know how to adapt yourself. You will hear much about the laws of success, the rule of life of successful men; but when you examine more closely into the lives of eminent men, you will find they have reached their position by widely different routes. You will find the secret these men possess, if indeed it may be called a secret, is so intimately and so indissolubly connected with their personality or individuality as to make it absolutely incommunicable. It is impossible to formulate a universal law of success. The inherent personality we call tact, which, however susceptible it may be of self-cultivation, is not transferable. No one else, no matter how learned, experienced, or prophetic, can foretell when or where the tide in your affairs will be at its flood; and when you realize it you will not have time to take counsel of your friends, but must take the current when it serves. Notwithstanding all this, you will not lack for advisers to tell you just how this thing is done; occasionally you will find some one, who has succeeded to a certain extent, who is willing to take the public into his confidence and patronizingly tell just what is necessary to repeat the miracle, while the many who have been less fortunate are actually garrulous on the subject, until you feel constrained to say, with Shakespeare, that "If to do were as easy as to know what were good to do, chapels had been churches and poor men's cottages princes' palaces."

I do not flatter myself that at the time of my graduation I was blessed with an unusual number of friends or even a long list of acquaintances, but the amount of advice that was tendered me on and immediately after that occasion was positively overwhelming; all of it good advice, too; much of it no doubt valuable, but unfortunately none of it negotiable. You will doubtless be subjected to the same course of treatment. Since this is the case I am glad to have the honor of administering the first few doses.

First of all, do not underestimate the importance of your calling. It is certainly unfortunate that so many physicians should grow skeptical in regard to the value of medicine and medical advice. Failing to realize the object of their zeal and ambition in finding a panacea for all the ills that flesh is heir to, they too often feel that they have to a certain extent failed in all, and overlook the hundreds of goodly offices they perform in their daily rounds, which, while they are of inestimable value to the patient, seem to the physician as matters of little importance, from the fact that they are but a repetition of things he has known and practiced for years. You will have to plead guilty to the oft-repeated charge that "doctors disagree," but guilty with these extenuating circumstances, that of the three commonly called learned professions—teology, the law, and medicine—the members of the medical profession are by far the most harmonious and fraternal. Our legal friends proudly tell us that law is the perfection of human reasoning, and straightway enter into a controversy as to what is law. The number of constructions to which each article or section of this perfected piece of human reasoning is susceptible is only limited by the number of courts or tribunals having the power of adjudication, while the opinions of the rank and file of the profession are as the sands of the sea. While our brethren of the cloth, after the lapse of nearly two thousand years, after having exhausted every means, from the suppliant tear to torture by the rack, in their zealous but vain endeavor to agree among themselves in regard to the way of salvation, a thing that was so plain even in the beginning "that way-faring men, though fools, should not err therein," are now, in the twilight of the nineteenth century, leading their flocks up to the pearly gate by a thousand "straight and only ways."
I mention these things, not in any sense of antagonism or criticism to either of the other callings, merely wishing to call your attention to the fact that members of our own profession are not the only ones who fail to dwell together in unity. If on entering practice any of you should be so unfortunate as to be in indigent circumstances, do not plead the poverty act, but make the best appearance possible. Let it be understood that you are offering your professional services to the public because you feel that you have sufficient skill in your profession to compare favorably with your competitors, and of sufficient integrity to command the respect of the community in which you live, and that you are not asking alms under the guise of professional patronage. No matter how many hardships you have undergone, or how great is your present necessity, you will gain nothing by pouring your tale of woe into the public ear, except pity, and with pity comes contempt, while you lose not only the esteem of your friends but your self-respect as well.

Goldsmith, who ought to know whereof he speaks, says: "To be poor and to seem poor is a certain method never to rise. Pride in the great is hateful, in the wise it is ridiculous, but a beggarly pride is a rational vanity which I have been taught to applaud and excuse." Avoid as far as possible talking of your business, of your professional affairs; in fact it is best not to be too communicative on any subject. It is not at all necessary, in order to be agreeable and congenial, that you should take every body into your confidence and give them a detailed history of your affairs; still less necessary that you should furnish the public with an advance sheet of your intentions or expectations. It should be a consolation to you to know that with a discreet silence even your failures, instead of being a source of chagrin and humiliation, become invaluable as matters of experience.

Carlyle says: "Who shall speak or sing the benignant efficacies of concealment, silence, and secrecy; altars might still be erected to them for universal worship. Silence is the element in which great things fashion themselves together. All the considerable men that I have known, and the most unstrategic and undiplomatic of these, forbore to babble of what they were creating and projecting." You will find, too, that the public is not as gullible as many would lead you to believe. Despite its tendencies to ride hobbies and run after strange gods, after a time it settles down to its sober senses, and its final estimate of men and things is very nearly the correct one. True, with a little knowledge and an abundance of noise, it is possible for a time to attract attention, but reaction soon follows, as Lincoln once said, "You can fool all of the people sometimes, and some of the people all the time, but you can't fool all of the people all the time."

When you see a man who succeeds year after year, and time after time, in the same place, with the same people, that man, no matter what you may think of him personally, or how great and glaring his faults, has something in his methods or make-up that you would do well to emulate.

In becoming an alumnus of this institution you have had conferred upon you an honor whose luster will brighten year after year. We are naturally and justly proud of our Alma Mater, proud of her for what she has done, proud of her for having the courage to stand by the right in the elevation of the standard of medical education by requiring a more rigid preliminary examination and a graded course of study. On the other hand, the Alumni Association feels that it can with becoming modesty say that the Hospital College of Medicine has every reason to feel proud of her alumni. In every competitive examination, whether private, municipal, State, or Federal, they have honored themselves and the institution. As teachers of medicine they hold leading and lucrative positions in all the colleges of this the second medical city in this country. As practitioners they have won honorable distinction in all departments of medicine in almost every State in the Union.

See that you each and all do something to sustain the good name of the Alumni Association, something that will redound to the credit of your Alma Mater, something that will be an honor to yourselves and your profession, and nothing that will dishonor either.

LOUISVILLE.
A TYPICAL CASE FOR RAPID DILATATION.*

BY J. G. CARPENTER, M. D.

President of the Central Kentucky Medical Society, Fellow and Organizer of the American Rhinological Association, Member Kentucky State Medical Society, Mississippi Valley Medical Society, Permanent Member of the American Medical Association.

Miss X., aged twenty years, former health good, family history excellent, has been a victim of hypertrophic rhinitis two years or more, and has developed the catarrhal diathesis, has nasal stenosis, headaches, asthenopia, impaired vision, and other subjective symptoms of former disease; besides has marked anemia and debility, constipation, painful defecation, irritation of the bladder, inactivity of the pelvic and abdominal organs, dyspepsia; for a year has had dysmenorrhea with various nervous reflexes, including tetanoid and opisthotonos preceding and attending each molimen, the tetanoid state lasting three to seven days, accompanied by the most extreme nervous prostration, pain, insomnia, headaches, and after subsidence of the period ten days or two weeks are spent in bed before temporary recovery is made from the dysmenorrheal disturbance; the whole cycle has repeated itself for half dozen or more periods, the last being always severer and more protracted than the former. During the paroxysm the thumbs are extended and drawn into palms of hands; the fingers, the index and second, are in a state of forced extension, the ring and little fingers semi-flexed and widely separated; the feet assume forced extension; the arms and legs extended and rigid; the jaws are opened and closed with great difficulty; head drawn back and the trunk and spinal column rigid; the tetany lasts through each period. A true picture of anguish, dejection, and sorrow is beheld.

The hypertrophic rhinitis and nasal stenosis were removed by snaring, cauterity, and other local treatment, and patient placed on the best nerve and blood tonics, and the health greatly improved. The anemia was dissipated, the nasal and throat affections with their attending symptoms, asthenopia, impaired vision, cured. But the dysmenorrhea with its sequelae continued unabated, and so far the patient has refused a digital and specular examination. Through the influence of strong argument and the fear of more suffering, impending danger, and loss of life, consent is given to have the local examination. The uterus is found retroverted, lying horizontal to the plane of pelvic inlet; as palisal, looks toward the bladder; the fundus lies in the concavity of the sacrum, diameter 1½ inches, the uterus pressing on the anterior sacral nerves, interfering with defecation when the bowels are costive; the endometrium red and secreting whites freely, showing a condition of subacute endometritis; the cervix conical and elongated; the ovaries are lower than normal, and quite tender and sensitive to digital touch and conjoined pressure. Patient was placed in the genu-pectoral posture, uterus replaced with fingers in vagina and perineum retracted, vagina inflated, then patient placed in recumbent posture and made to lie on face and sides for a week, using every day a vaginal injection of hot water, then for four weeks tampons with elastic wool saturated in glycerine. A two-per-cent solution of carbolic acid with 1 part tr. iodine to 7 glycerine, applied to endometrium every five days; uterus was restored to normal position, general health improved, and a Thomas retroversion pessary is substituted for elastic wool, and gives comfort. Condition of patient very much improved, but for two periods the tetany with the severe dysmenorrhea returns and lasts about three days. The dysmenorrhea being no better, the tetany continuing to return, the uterus being free from adhesions, the absence of salpingitis ovaritis and other intra-pelvic complications, and patient yet unrelieved, though a sound or applicator will pass tightly through the inner os, the case is now considered a typical one for rapid dilatation (Goodell's modification of Ellenger being far superior to other methods).

The operation was done under the local use of cocaine and internal use of whisky, and without great pain, yet by pushing the whisky its general anesthetic effect is had and the rapid dilatation becomes painless. Five days after her period rapid dilatation was done, repeated every ten days or three times before the recur-
rence of next period. This molimen occurs free from pain, tetany, and other reflexes. Menstruation is natural in quantity, time, duration, and color.

Miss X. is elated with success of treatment, says she is well, and stops treatment. But the next period has all the former dysmenorrhea, tetany, and reflexes; but again, shocked with fear for worse ills, pleads for rapid dilatation and treatment of endometrium, which is done every seven to ten days, two to five days before and after period, for four months, when recovery is complete.

While this case has been cured in the end by rapid dilatation, yet had dilatation been practiced earlier a far worse state of affairs would have been caused, numerous intra-pelvic complications produced, and the last state would have been worse than the first, since lesions would have resulted that would have demanded abdominal section as a radical, conservative, life-saving measure.

Rapid dilatation is a good thing—yet it is a bad thing—a dangerous surgical remedy in the hands of the routinist who is unskilled, the young, inexperienced physician, and the competent but reckless doctor; like trachelography, curettling, caustic applications, the uterine sound to the endometrium, and the electrode, it has placed to its credit a long series of major operations, and some deaths. Unless doctors know the when, how, and what, dilatation should never be done by them. Physicians, through want of skill, the desire and pluck to be doing something, not knowing the when, grope their way in the dark, practice minor gynecology, tinker and tinker, become "supply stores," wholesale, or manufacture cases for the abdominal or pelvic surgeon. There are cases demanding rapid dilatation or other minor gynecological measures, and the skillful physician would be derelict of duty not to use them; their proper use must be commended, their improper use condemned.

 Permit me to say, without egotism, that unfortunately for humanity so many young graduates, as well as senior members of the profession, appropriate to themselves the stupendous title, Gynecologist, and seem to think the essentials to a successful practice and fortune are the speculum and uterine sound, curette, Goodell's dilator, and Thomas' retroversion pessary, and handle the sound with as much recklessness as the dude twirls his cane, and imagine all intra-pelvic diseases are uterine.

The ultima thule is fewer and better practitioners, a less number of medical students, fewer and better medical schools, with enlarged hospital experience, and instead of three years' course of study being compulsory, make it five years or longer, with abundant clinical or hospital experience, and gynecology taught and learned before it is put into practice. Unfortunately only the minority of every graduating class have had proper clinical experience with which to begin practice; the majority seldom reach mediocrity—they start wrong, go wrong, and end wrong.

There are cases demanding rapid dilatation and other measures, or both, and the physician would be derelict of duty not to use them. Their proper use must be commended, their improper use condemned.

The scriptural adage, "Be temperate in all things," is highly appropriate in the practice of minor gynecology. That the minor gynecologist too often ignores or is incompetent to detect existing intra-pelvic diseases when practicing these methods, or by the practice produces intra-pelvic diseases, there can be no doubt. Just in proportion to the abuse of rapid dilatation and curettling and other minor measures does he become a feeder to the major gynecologist or abdominal and pelvic surgeon. Only a few weeks' observation and study and analysis of cases in the practice of men in the profession like Drs. Joseph M. Price, Charles B. Penrose, E. E. Montgomery, and Hoffman, of Philadelphia, and T. A. Emmet, of New York, would convince any "doubting Thomas" that certain causes of major pelvic troubles are traceable to minor gynecology. Yea, we do not have to go to New York or Philadelphia to see the awful and calamitous work of the minor gynecologist; it can be found in Kentucky.

In one class of patients you will find the major pelvic troubles traceable to a dirty confinement or too early leaving bed and resuming household duties, or hardships, or other minor
imprudences; to imprudences during the menstrual molimen and frequent abortions; others have had a gonorrheal infection or sexual abuse; others date origin of the ailment to an improperly adjusted pessary, to the use of the sound or probe, caustic applications to the endometrium or os; others to operations on cervix (trachelorraphy) or to electrode; others to rapid dilatation or curetting, etc. That the general practitioner too often generalizes in place of specializing, and the specialist too often specializes instead of generalizing, there can be no doubt, and that the gynecological tinker tinkers with his patients until major pelvic troubles arise and his patients pass into the hands of the pelvic surgeon is self-evident.

These major pelvic troubles, many of them, like Banquo's ghost, will continue to arise, because they will not down or cease until the pseudo-gynecologist ceases to tinker. These questions may be asked: Is forcible dilatation and curetting ever essential? and when are they indicated? Answer, yes. When and by whom should it be used? It should be used by the aseptic physician or surgeon who has been taught by practical experience and differentiation the pros and cons for these measures, and as a dernier ressort; but sometimes, as in cases of hemorrhage and putrid placental infection, their use as means of primary remedial importance must be considered in order to save life and prevent sepsis. With aseptic instruments, through the aseptic vagina, os, and cervix, when dilatation is accomplished, make the endometrium aseptic with hot water, the bichloride or boric solutions, iodine and glycerine mixture, Churchill's tincture of iodine, the liquid vaseline and oil of eucalyptol or menthol solutions, the insufflation of bismuth subnitrate or iodoform. The vagina should be kept aseptic pro re nata by hot antiseptic douches and the aseptic vulva pad to prevent decomposition of the uterine discharge and infection. Before forcible dilatation is resorted to, the patient should be given a hot water and soap bath, purged freely, and placed in bed at rest twenty-four or forty-eight hours, and the vagina doused with hot antiseptics every six or twelve hours. After the operation the patient should be kept at rest in bed one or more days until all manifestations of a local or constitutional reaction have subsided and she is free from danger. The operation should never be done in the private or consulting office, and never by the pseudo-gynecologist; nor oftener than at intervals of ten or fourteen days, at least five days before and after the menses, and when the disease is limited to the uterus per se, and there is an entire absence of disease in the pelvis.

These measures, though sometimes indicated and though no intra-pelvic inflammation is present, may do and have done incaulcable harm by setting up pelvic diseases. Even though slight, no dilatation should be practiced unless absolutely required by patient to cure or to save life. Rapid dilatation and curetting are distinct traumatisms, and all the dangers incident to septic absorption may attend them that follow any other violent procedure.

Dr. Joseph Price states in reference to rapid dilatation: "This conclusion, reached inferentially, has been abundantly confirmed on the operating-table by much of my later pelvic work. In a number of cases with a history of preceding dilatation the after-operation has exhibited an inflammatory condition of affairs as complicated as any other; in my experience some of the dilatations were done with pre-existing disease which was made worse by the interference, while others were done simply to relieve the dysmenorrhea, and resulted in the establishment of a complicated surgical disease in which operation was necessary to save life. All in all, I believe that judged simply by its remoter effects the operation of rapid dilatation is a dangerous one, and results oftener in subsequent harm than in lasting good."

Dr. Price, in referring to the article of a minor gynecologist, states in debate (Philadelphia County Medical Society): "He is the great mischief-doer. He tinkers, dilates, curettes, passes the sound, and in four to six weeks he (Dr. Price) gets a telegram to come and open the abdomen to save the patient's life; that the woman is leaking; that she has a pulse of 130 to 140, with temperature of 104°. This recurs weekly; also stated, of specimens in a jar removed during the month of August, fifty per cent followed dila-
tation, closure of cervix, the use of the sound and curette. These specimens have come from four clinics in this city (Philadelphia) and from ten prominent gynecologists. They all had sections to save life, and all were greatly complicated operations. These fibroids in the jar had pus in them, the result of electricity. This private office work has a great deal to do with it. Many of these men are simply cervix feelers, and never find anything above it. There may be a mass larger than the uterus on one or both sides which they fail to find. They are not anxious to find them, and would not be troubled by them or capable of dealing with them if they struck them accidentally."

This state of affairs existing in Philadelphia! The havoc wrought by the minor gynecologist could be doubtless estimated ad infinitum throughout the world.

Dr. Emmet for a decade or more gave the danger signals of minor gynecology ignorantly and thoughtlessly practiced, but the warning has only been heeded and appreciated by the few. The many, it might be truthfully said, have gone on their way in midnight darkness, causing pain and anguish, destroying important organs, wrecking constitutions, and losing of life. Emmet's Principles and Practice of Gynecology is replete with aphorisms of wisdom, lighting the pathway all along the line, and is to the major gynecologist a "Sermon on the Mount;" but the pseudo-gynecologist or gynecological tinkers are deaf and myopic, and would not turn from the error of their way "though they had Moses and the Prophets to warn them."

When so skillful and erudite a surgeon as Dr. Emmet has had harmful results follow forcible dilatation and curettage, with all his care, diagnostic and operative skill, pain-taking and prophylactic measures, one is forced to believe inferentially that other surgeons have certainly had experience similar to Dr. Emmet if they followed up their cases, correlated them, and hunted for after claps.

Indications for Dilatation. Dysmenorrhea due to cervical stenosis; its cause should be reached by exclusion. There is sometimes primary stenosis, all other conditions being normal; the mucous membrane engorged at the menstrual nitis constricts the internal os, and when there is endo-cervical and corporal metritis in the virgin or nullipara, the stenosis may become much aggravated, especially if, in addition to the hypertrophy and hyperdistension of the mucous crypts with closed orifices and pent-up sections, there is hyperplasia of the submucous connective tissue. By one familiar with the occlusion of the nasal chambers from chronic and hypertrophic rhinitis, it can be readily perceived how a similar condition of the uterine mucous membrane could cause and aggravate a stenosis of the internal os, and how the displaced uterus in the form of versions, flexions, and obliquities, single or combined, could cause stenosis like the flexed or dislocated partition of the nose, and be amenable to restitution and dilatation to straighten the uterine canal, making it more patent; the pressure opening the orifices and emptying the distended crypts of their contents, allowing their walls to collapse, besides causing absorption of effused fluid and unorganized lymph. By straightening the uterus we also straighten the arteries, allowing increased nutrition; by rectifying the veins we relieve passive congestion, removing the engorgement from the overloaded capillaries, and in a similar way we increase the functions of the lymph channels. Not only may an enlarged uterus be benefited in this way, but also a uterus of natural size afflicted with endometritis. When the walls of a displaced uterums are straightened by dilatation the womb is much more easily retained in normal position, and gets more patent at the internal os. Some operators would recommend dilatation for infantile uteri, to increase their nutrition and size, but we doubt the expediency and believe the weight of authority is against it, since their cause is tubal and ovarian. After dilatation the distended crypts can be scarified or punctured; dilatation is often essential for diagnosis of intra-uterine growths and foreign bodies, and as a preparatory step to curettage. Emmet speaks of the beneficial effects of forcible dilatation for malarial congestive hypertrophy of the uterus. We can also often obtain information of the pressure, size, and positions of intra-uterine growths, and use it as a preparatory step to removal of them. Dilatation is essential to wash out the uterus when there is sepsis, and in
conjunction with curetting to remove septic material and arrest hemorrhage. Rapid dilatation should never be used unless the cause or case demanding it is urgent. Emmet states if pregnancy exists and a tent has been already used, or if there should be hemorrhage, there will be less risk from rapid dilatation than under other circumstances; it is always attended with the danger of exciting inflammation.

Inflammatory disease may extend by continuity of tissue into the tubes, ovaries, and peritoneum from the uterus, producing peri- or para-metritis, or these can be caused by intra-uterine instrumentation per se, or the dilator. If uteri free from intra-pelvic complications only were dilated and curetted under proper conditions, and were a thorough and intelligent digital and conjoined manipulation made in every case, before instrumental treatment is used, pelvic disease would be detected, and non-interference would be the rule, and major pelvic operations to save life would be less frequent.

When the minor gynecologist ceases to tinker there will be far more tubes and ovaries remaining in the pelvis. It is to be hoped that the millenium is at hand, that the "goats will be separated from the sheep," and to the pseudo-gynecologist the scriptural injunction proclaimed, "Depart, ye cursed, I never knew you," will be fulfilled, and that woman will keep her normal uterine appendages instead of having them removed and placed in bottles. The more experienced and skilled the diagnostician is, the less often will he resort to dilatation and other minor measures; conversely, the more ignorant and unskilled the operator, the oftener he will use these measures and greater will be the disaster to health, happiness, and life.

On account of the asthenopia and impaired vision the oculist would doubtless have said, we will cure by putting glasses on her; the rhinologist would use the galvano-cautery; the neurologist would have said she has spinal irritation, anemia, or congestion, extended to the ascending parietal and first frontal convolutions; the general practitioner, she has gastric dyspepsia, torpid liver, and gastrodynia, or hyperesthesia; the rectal specialist, she has partial rectal occlusion or stricture; the minor gynecologist, she has ulcerated os, and needs nitrate of silver; genito-urinary specialist, chronic cystitis or calculus. But the specialist would weigh all the factors in the case, reason from cause to effect, survey the whole field, hunt for pathological lesions, like the true Christian searching the Scriptures for the truth; step by step turning on the light, drawing the line between healthy and unhealthy conditions, between a neurosis or reflex and the diseased organ itself, until the bottom rock or foundation stone of the disease is reached by differentiation or exclusion, and when the diagnosis of the disease, with or without complications, is made, he would treat them by the best and most recently approved methods, and restore his patient to health.

STANFORD, KY.

Societies.

THE LOUISVILLE SURGICAL SOCIETY.*
Stated Meeting, May 9, 1892, E. R. Palmer, M. D., President, in the chair.

Dr. Turner Anderson: I present here a young man whose hand was injured in riding on a bicycle about a year ago, which was followed by the formation of pus, leaving an intractable ulcer which showed no tendency to heal. This was opened up and a lot of caseous material scraped away. About two months ago he began to suffer with pain, which gave the ordinary evidences of bone trouble. A second abscess has formed and is now discharging. The case has evidences of scleroderma.

Dr. A. M. Cartledge: I would like to present this case to the Society, and with the following history: The patient is thirty-five years of age, family history good. During the summer of 1881 he injured himself slightly on the hip by jumping out of the window. Some six months afterward the hip became very much inflamed with the formation of an abscess, which was opened by his physician. This opening never closed, when, in February, 1884, the opening was enlarged and the bone scraped. After

*Stenographically reported by C. C. Mapes, Louisville.
twelve weeks a second operation was performed, consisting of resection of the head of the femur.
From this time on he improved and has remained in fair health, with good locomotion by means of a high shoe, until 1891. In October, 1891, an abscess formed in the right iliac fossa, also in the cicatrix of the old resection wound, breaking at the latter point and discharging. This leads up to the time when I saw the patient, the 12th of December, 1891. At that time there was a large abscess in the right iliac fossa pointing near the anterior superior spine of the ilium. A sinus was also discharging from the lower portion of the cicatrix of the old point of excision at the hip. An incision was made into the abscess in the iliac fossa and a large amount of fetid pus escaped. In advising with his physician I suggested that after he improved from the discharge of so large an accumulation of pus, we enlarge the old wound over the hip-joint externally; that I was satisfied we would find perforation through the acetabulum had taken place, hence the iliac fossa abscess; that we would attempt by this means, after removing any necrotic bone found, to secure drainage from the iliac fossa abscess through the acetabulum below. Three days later, his condition having much improved, an incision opening up the old resection incision was made down to the acetabulum and the upper resected head of the femur. The rim of the acetabulum was necrosed, as well as the bottom of its cavity, and as anticipated perforation had taken place, also the upper extremity of the femur was extensively diseased. All the curvies bone accessible was removed and the underlying structures thoroughly curetted. It was now deemed advisable to abandon any attempt to get independent drainage from the accumulation of matter in the iliac fossa, believing that, as the offending material had been largely removed, drainage at this point would suffice. To this end the wound was packed with gauze and an antiseptic dressing applied. The patient reacted well from the operation, the dressings were changed on the second day, and the wound irrigated and redressed. On the evening of the third day, about six o'clock, he had occasion to sneeze; very soon afterward he complained to his wife that he felt dizzy and that the bed seemed very warm. This led to the cover being raised, when the patient was found to be deluged in blood. The mattress was saturated even to the blood finding its way through on to the floor. The patient within a minute or two fainted from loss of blood. His physician and myself were rapidly summoned. When I reached his bedside, some twenty minutes afterward, I found his physician had preceded me a few minutes. We found the patient pulseless at the wrist, but he had regained consciousness. An examination of the wound, the dressings being removed, at first revealed nothing that would lead to the point of hemorrhage, yet I at once suspected that it was an ulceration into the external iliac through the superficial incision that had been first made to open the abscess in this region. On further examination a suspicious clot at the bottom of this incision showed the point of danger. In removing this clot gently with forceps, a most frightful gush of blood again took place. A finger was placed into the bottom of the abscess cavity over the opening in the bleeding vessel, and without anesthesia the small original incision by which the abscess had been evacuated was enlarged for two inches in an upward direction. The opening which had been produced by ulceration into the vessel was clearly discernible and was as large as a pea, the vessel seeming to be of unusual size, due to the old inflammatory condition in the immediate vicinity. No difficulty was experienced in passing a ligature above the diseased point in the vessel, but when attempts were made to secure the vessel below the opening, it brought the ligature down so near to the point of origin of the epigastric and circumflex iliac that great difficulty was experienced in securing it. This, however, was finally accomplished and the wound drained by strips of gauze.

The after-history of the case has been uneventful; the man has made an uninterrupted recovery. There was little trouble experienced with circulation of the limb. As you will observe to-night, pulsation in the common femoral can not be detected. The wounds have all closed, except a small sinus at the lower extremity of the wound over the femur. His health is good and he is able to follow his work.
Dr. H. H. Grant: I desire to report an operation for radical cure of hernia on a man aged twenty-four years. The tumor, which was larger than an average coconut, had been irreducible for eight years, and is represented by the photograph I exhibit here to-night, taken before the operation. The patient had secondary syphilis, with two chancroids on the penis at the time of operation (three weeks ago), but was anxious to be relieved. The penis was wrapped in gauze and kept thus from infecting the wound. The hernia proved to be of both the congenital and infantile form, the tunica vaginalis open to the inner ring, and inclosing a pouch of the peritoneum in which the intestine and a large part of the omentum were found. The adhesions between the two sacs and the testicle and cord were so extensive the only way seemed to be cut the inner sac off above the testicle, to which it was firmly adherent, and separate it from the cord up to the inner ring. The sac was then folded on it after the manner of McEwin, and the external wound treated after the McBurney method. Three weeks have elapsed since the operation, and by an examination of the patient you will see granulation is still in progress though almost complete. A spica-bandage was used to keep up pressure until a truss could be worn. Though the result thus far is satisfactory, it is not looked upon as indicating a radical cure at so early a date.

Dr. W. C. Dugan: I would like to exhibit a case of skin disease on the right side. The neck, shoulder, arm, and leg, in fact the whole right side is affected, with entire loss of sensation on that side. The lumbar plexus is involved; the sciatic is not affected.

Dr. Cartledge, referring to the case presented by Dr. Anderson: I am of the opinion that it is of syphilitic or tubercular character, and advise removal by the knife after putting patient on mixed treatment.

Dr. W. L. Rodman: The appearance is that of tubercular ulceration.

Dr. A. M. Vance: I am inclined to think it is a case of syphilis, and may be congenital.

Dr. E. R. Palmer: I perfectly agree with what Dr. Vance has said.

Dr. Anderson: I presented the case for diagnosis. It is interesting on account of its chronicity. I was surprised that it did not get well after curettage. I do not think it is syphilis, unless there is such a thing as congenital syphilis manifesting itself in the adult. His history is clear of any thing of this kind. It may be tubercular, but I am still in doubt.

Dr. Palmer: There are numbers of cases where congenital syphilis has first appeared in adult life. Personal history and moral character have little to do in the diagnosis of this disease.

Dr. Cartledge: A case that we diagnose as tertiary syphilis will improve equally on cod-liver oil or minute doses of mercury.

Dr. Palmer: This case has very much the appearance of a ulcerative tubercular syphilide.

Dr. Milliken, of New York, referring to the case exhibited by Dr. Cartledge: It seems to me that peroxide hydrogen injection with curettting would probably heal this sinus.

Dr. Vance: I think this is a case where conservatism should be practiced. I believe it will heal under the cleansing treatment. Concerning Dr. Grant's case, I think he has a good result, and that the patient ought to wear a truss.

Dr. Cartledge: Time enough has not yet elapsed in this case to form an opinion as to permanent results.

Dr. Grant: I did not report this as a radical cure, only as a difficult one for operation.

Dr. J. A. Ouchterlonny, referring to Dr. Dugan's case: I think it is dermatitis intensified by syphilis. The hoarseness suggests that an examination of the throat might show more characteristic symptoms.

Dr. Palmer: The case is modified by filth; this removed would clear it up.

Dr. Dugan: I think it is hardly syphilis, and believe it due to scoliosis involving the spinal nerves.

I have two pathological specimens that I would like to exhibit: First, a post-mortem tumor of the bladder, removed from a patient seventy-two years of age. I had previously removed several gall-stones from the same patient. The man died of pneumonia.
The second is a scrotal tumor. It did not feel like hernia; it came on suddenly with great pain. Looks like hematocele. Tried to dissect up the tunica vaginalis from the testicle; sacrificed testicle. Contents clear fluid. There was no gut down in the sac.

In lieu of an essay, Dr. Milliken, of New York, gave a description and demonstration of Bassini's radical cure of hernia.

Dr. Cartledge: I am much interested in this operation. Have never liked the McBurney method. My usual method of operation is to tie off the sac high and suture the pillars and overlying structures. Some of my cases have gone four years without recurrence, while a larger per cent have found it necessary to use a truss.

Dr. Vance: I think the thing to try to do is to get primary union. Do not think any operation can be called radical with the exception of that on children. I believe that the most of the cures that have been radical are those that have worn trusses.

JOHN G. CECIL, M. D.,
Secretary.

NEW YORK ACADEMY OF MEDICINE.

Section in Pediatrics. Stated Meeting, May 12, 1892. Dr. W. P. Northrup, Chairman.

A case of ranula was presented by Dr. J. Lewis Smith. The child was twenty months old, and the ranula was noticed soon after birth. It did not interfere with nursing, but was beginning to produce a deformity, causing the mouth to open, giving the characteristic frog-like expression. The child did not talk, although of ordinary intelligence. Development was somewhat retarded, and for three months there had been no increase in weight. The tumor was double, occupying both sides of the frenum, and apparently very vascular. Large vessels could be seen radiating over the surface. Two operations were available. One consisted in passing a silver wire around and through the mass so as to obliterate it by causing inflammation. The other was excision of a portion of the growth, but owing to its extreme vascularity serious hemorrhage was to be feared.

Dr. S. Baruch thought the danger of hemorrhage was not great, and favored the excision of two thirds of the mass.

A case of microcephalus was presented by Dr. Henry Koplik. The patient was four months of age and was the sixth child. The head was very small, the anterior fontanelle was open, but the sutures were closed. There was distinct left facial paralysis, and upon touching the lower jaw it moved with a spasmodic jerk. The legs were deformed from lack of development of the peronei muscles. The reflexes were increased, and there was also spastic contraction of the fingers. Nystagmus was observed, but was not constant, appearing only when the child looked toward the left. The probable condition present was microcephalus with congenital retarded development of the cerebrum, with involvement of the pyramidal tracts. The question of a Lannelongue operation was a very important one. The speaker believed that the nervous symptoms indicated lack of brain development and that nothing would be gained by operating on the skull.

Dr. W. M. Leszynsky believed that the Lannelongue operation was a very serious one. He had recently seen two fatal cases. In the present case he did not believe that an operation upon the skull would aid the brain, which was evidently an undeveloped one.

The subject of discussion was Summer Diarrhea in Children under Two Years. The first paper, entitled Relation of the Stools to the Lesions and to Prognosis; Nervous Symptoms and their Origin, was read by Dr. Henry D. Chapin. When the disease is located in the two extremities of the alimentary canal, the stomach and the lower segment of the large intestine, the discharge will quite surely locate for us the seat of trouble. In the intermediate tract, however, it is usually difficult to judge with certainty, either the extent or location of the lesion by the character of the stools. A classification that can be made only upon post-mortem examination is of but little value clinically. The following is a fair clinical classification and includes the vast majority of our cases:

1. The diarrhea of acute indigestion.
2. The diarrhea of inflammation.
3. The diarrhea of chronic indigestion or atrophy.

In the first the stools consist of fecal matter, soon becoming thin and watery, and containing particles of undigested matter, consisting chiefly of lumps of fat and undigested caseine. If these undigested masses continue to be passed, the stools soon contain more or less thin mucus. If starchy food has been given it may be passed unchanged in appearance. In general the passages in acute indigestion consist of undigested and fermenting food and the products of an irritated mucous membrane.

There is a point where irritation if unchecked becomes inflammation, and the second form of diarrhea is developed. It is difficult here as in other places to always distinguish that point; when well developed the temperature will remain elevated. The passages, if milk is the food, will contain masses of fat and lumps of curd. If milk is stopped and meat broths are given, the passages usually become darker colored and contain very offensive feculent matter. Mucus, in various conditions, soon becomes a prominent element. If colored with bile pigment it is an indication of jejunal or iliac catarrh and is usually accompanied by undigested food. The closer the mixture of the mucus with the fecal masses the nearer is the lesion to the cecum. When the lower colon is most involved the mucus will be more distinct, passing in glairy masses or sometimes in pulpy shreddy particles presenting the appearance of false membrane. Blood, if mixed in streaks, comes from the ileum or upper colon; if free and red, from the lower colon or rectum.

White, dryish, putty-like stools consist principally of fermenting fat; brownish stools of albuminous matter from animal broths, frequently very offensive from advanced decomposition. The yellowish, watery stools are simply the ordinary fecal discharges diluted. The causation of green stools has been a subject of much controversy. However caused, they are clinically noticed in connection with much irritation of the bowels with active fermentation of their contents.

The presence or absence of ulceration can not be determined with certainty from the character of the passages, but when there is rapid loss of vitality out of proportion to the number and character of the stools ulceration is to be suspected.

The most persistent form of diarrhea and most difficult to treat is that resulting from chronic indigestion and atrophy. Putty-like stools alternate with green mucus or brownish offensive discharges. Assimilation becomes more and more defective, and the child dies from exhaustion. The underlying trouble is defective vitality, not inflammation, and antiseptics and astringents are useless.

The nervous symptoms accompanying summer diarrhea are numerous and often serious. Impoverished blood passing sluggishly through the brain will account for some of them. It is probable, however, that as a rule these symptoms are due to irritation produced by toxemia. Such toxemia may be caused by the absorption of ptomaines resulting from fermentation of the bowel. The brain symptoms thus produced often disappear upon thoroughly cleaning the bowel. Uremic poisoning is also responsible in some cases for brain symptoms and death.

Conditions Indicating Change of Air and Baths in the Summer Diarrhea of Children was the subject of a paper by Dr. Simon Baruch. The removal of the cause of disease being the chief aim of modern therapy, the insanitary conditions which actively contribute to the development and maintenance of summer diarrhea become an important element.

A change of air is not demanded by reason of any special difference in the proportion of oxygen or other chemical constituent, but rather to avoid two sources of error:

1. A high temperature and marked humidity, one or both.

2. The presence of impurities.

Whenever treatment seems unavailing and prostration and intermitting fever are present, the question of a change of air becomes important. Of what avail are tonics, tonics, and food when the little sufferer is forced to toss under the constant oppression of a stifling atmosphere, especially if there be also an excess of moisture. Rich and poor alike are crushed under this terrible combination. Removal by a rapid and comfortable journey to a high altitude or to the sea-shore free from these preju-
dential conditions becomes imperative in many cases. The change in the entire aspect of the case is too well understood to need comment.

Among the well-to-do classes atmospheric impurities are rarely operative in summer, though imperfect ventilation often breeds them in winter. In the tenement districts of large cities, however, this is an active factor. In these noisome tenements, in which the children of the poor and many even of the better class of working people are huddled together, the elements which contribute to the development and maintenance of summer diarrhea find an excellent place for their culture and propagation. The elements demanded in the prevention of this disorder are clean food taken into a clean stomach and its detritus removed through a clean intestinal tract. It is to obtain these conditions, not more oxygen, that a change of air is demanded. The work carried on by the St. John's Guild is deserving of the utmost commendation. To the poor this change from the filth-laden atmosphere of the city to the pure breezes of the harbor comes as a re-vivifying blessing that can not be overestimated.

One point in this connection must be noticed. While of the utmost importance in the tenement districts, it is not always so important where the conditions are more favorable for home treatment. The change from a comfortable home to a country hotel, often overcrowded, is not to be advised without careful reflection. The benefits accruing to the little patient do not always warrant the expense, anxiety, and disturbance of family resulting from a sudden removal of a child without due preparation when the symptoms become alarming. The advantages and disadvantages should be carefully considered. We should see that the milk is sterilized, that the colon has been irrigated, and that all measures have been tried before advising a change.

The lessons derived from a long experience at a summer resort are two:

1. While all cases of summer diarrhea of infants living in crowded homes demand change of air, treatment is at least equally important.

2. Among the better situated change of air need not be insisted upon until all approved methods of treatment have been fairly tried.

Bathing for cleanliness is always demanded in summer diarrhea, both for the purpose of cleanliness and by maintaining the functions of the skin to relieve intestinal congestion. For therapeutic purposes baths are especially indicated in acute cholera infantum, for they offer more positive relief and contribute more to cure than all other measures. In this condition we find hyperpyrexia, though the extremities and face may feel cold and clammy. Whenever the temperature exceeds 102° F. a cooling procedure is indicated, and it is important that the proper method of bathing be observed. The child should be placed at full length in a tub of water at 90° after the face and head have been bathed with ice water. Gentle friction should be constantly applied while some one is removing with a pitcher the tepid water and replacing it with ice water. The temperature of the water is thus gradually lowered to 80°. If cerebral symptoms are present, water at 60° should be poured over the head and shoulders. The bath with friction should be continued fifteen minutes unless cyanosis of the face or decided shivering appears.

The latter is prevented by active friction. After the bath the child is placed upon a linen sheet laid smoothly over a blanket. If the temperature before the bath was 103.5° or over, it should be wrapped and allowed to dry; if under that, it should be dried and the clothing replaced at once. It should be understood that the object of the bath is not primarily to reduce temperature, although this is an important incidental result. We have here a vaso-motor paralysis as evinced by the pallor of the skin when the rectal temperature is high. This condition is counteracted by the bath and frictions as described. The effect of a skillfully administered bath in such conditions of nerve prostration must be seen to be appreciated.

In the subacute forms of summer diarrhea the chief condition indicating baths is the general depreciation of the system arising from the great drain upon the blood and nerve tone. We have here the symptoms of chronic adynamia. To stimulate the appetite and improve the general nerve tone should be our endeavor. The most approved tonics often fail. In these cases general ablutions morning and evening
are preferable to baths. The child is placed on a soft woolen blanket and the abdomen, chest, and back are rapidly bathed, not sponged, as follows: From the hollow of the hand water at 70° F. is poured upon the skin, which is then gently rubbed with the same hand. The body is rapidly dried and friction with a rough towel is employed if the temperature is below 99.5°. If the temperature is above 102° a general bath is indicated.

The Use of Drugs in Diarrhea; Indications for Antiseptics, Astringents, and Opiates.

Dr. J. Milton Mabbott read a paper upon this subject. Much clinical and experimental effort has been expended in recent years upon that much-vaunted class of drugs, the antiseptics and antizymotics. It was early inferred that it would be difficult to find an antiseptic capable of internal administration in doses sufficient to kill microbes without proving poisonous to the patient. Baruch five years ago referred to the large quantity of antiseptics necessary to sterilize so extensive a surface, and Vaughan showed the feeble inhibitory power upon the tyrotoxicon producing germ of all the antiseptic drugs. Holt has pointed out that by reason of absorption the soluble antiseptics cannot reach the lower bowel where the chief trouble lies. But insoluble drugs in a fluid menstruum have very weak antiseptic power. It is probable that the action of bismuth is due more to its astringent and soothing properties than to its antiseptic power. It seems impossible at present to administer antizymotic drugs by the mouth in such a way as to influence materially the small and large intestine. We are obliged to admit that they have been tried and found wanting.

Nevertheless the bacteriological studies of the disease, especially those of Booker, have taught us to secure asepsis where we can not apply antisepsis. They have also made clear the rationale of certain drugs, especially carthartics.

Stimulants though locally undesirable are at times necessary, and sedatives may be required to relieve pain.

Until recently there seems to have been general consent to the administration of alkalies. But now that we endeavor to promote asepsis and control fermentation by evacuant, dietary, and hygienic measures, they are certainly less important than formerly. They are usually given with or soon after feeding. When using peptic, alkalies should be given midway between feedings.

The indications for acids are doubtful. Lactic acid, as proposed by Hayem, is advocated in (1) acute infectious diarrhea where the stools are numerous, watery, and often foul, but yellow in color, and (2) in green bacillary diarrhea, for which it is recommended as a specific. Numerous observers have found the reaction of the alimentary canal in healthy infants acid throughout, and Pfeiffer has shown that green stools are associated with alkalinity. Hence, the use of acids would seem to have a rational basis. The dilute mineral acids are commended by many, the dose being one to five drops, administered twenty minutes after feeding. The vegetable astringents have during the last few years been almost discarded. The same is true, also, of mineral astringents with a single exception. That exception is bismuth, the subnitrate being the preparation universally esteemed. It is prescribed in much larger doses than formerly, twenty grains every two hours sometimes being given to an infant.

Opies are less used than formerly. It undoubtedly checks peristalsis. As peristalsis is increased in diarrhea, this action is desirable after the bowels have been emptied of their objectionable contents, but highly dangerous before. The other indications for opium are the relief of restlessness, pain, and tenesmus, and the control of frequent watery passages. Ashby and Wright recommend it in the latter stages if the passages continue small and numerous. Holt and Crandell always prescribe the opiate separately, so that it may be conveniently increased, diminished, or withheld at will, for increasing fever or toxic symptoms call for its discontinuance. It should not be given when the passages are infrequent and of bad odor. A decrease in the number of stools, while they become more offensive, contra-indicate its use and demand evacuants. Relief of pain is one of the highest duties of the physician, and unless definitely contra-indicated sufficient opium should be given to accomplish this.
Feeding, Sterilized Food, General Feeding, was the subject of a paper by Dr. Henry Koplik. A number of cases were reported in detail which tended to show that while some infants taking an artificial food show no traces of sugar in the urine, there is a considerable proportion which do show this abnormal condition. On the other hand, infants taking rationally prepared milk or mother's milk showed no trace of sugar.

Although numerous theoretical reasons may be given against the use of sterilized milk, clinical experience proves that it is better tolerated by the stomach than any other artificial food. It has a peculiar taste, but infants soon develop a liking for it and prefer it to other milk.

At the Good Samaritan Dispensary during the summer of 1891 milk was sterilized on a large scale. Six bottles containing four to five ounces of milk were given to each patient, the sum of eight cents being charged. In this way over 40,000 bottles were distributed to 575 different infants. The results were favorable in the extreme. The chief drawback was inability to control the milk before receiving it at the dispensary. Changes that have already taken place cannot be remedied by sterilizing. Milk that appears to be good when cold will prove unfit for use when heated. Milk that is several days old may show no signs of change, but when boiled will promptly curdle, owing to the formation of lactic and other acids. When sterilized it will appear flocculent and should be rejected, as it is positively dangerous. It is almost impossible in New York to obtain milk less than twenty-four hours old, and much of what is used is several days old and has been preserved by means of ice and chemicals.

To obviate certain changes which take place in milk sterilized at high temperature an attempt has been made to destroy the activity of the germs by subjecting it to a lower temperature.

In Boston, Dr. Rotch has accomplished this at a temperature of 167°F., but the milk used is unusually fresh and pure. Another method recently proposed is that of bringing the milk quickly to the boiling point and then placing it at once in a cool place. While milk thus treated keeps much longer than ordinary milk, it should be distinctly understood that it is not sterilized.

Resterilization by repeatedly subjecting milk to a high temperature is not to be commended. Milk is a very complex fluid, and every disturbance of its elements renders it less desirable as a food. Our aim should be to produce as little change as possible. If, therefore, it can be rendered safe by heating to a less degree, it should be done. This process of heating milk to a temperature of 167°F. and cooling it quickly is now known as Pasteurization. It does not actually sterilize the milk, but renders inactive certain ptomaine-producing germs. Such milk will keep several days, and as at this temperature it is but little if any changed in its constituents it presents an improvement over the older form of sterilized milk.

Dr. I. J. Lewis Smith asked Dr. Koplik how long he would subject the milk to heat in the process of sterilizing. Before sterilized milk was known he had been in the habit of directing the milk for the child to be subjected to the heat of boiling water for two hours, but now advises but twenty minutes.

Dr. Koplik replied that after twenty or thirty minutes, when the Arnold Sterilizer is used, the hood could be removed.

The chairman referred to the formula proposed by Dr. Blackader at a recent meeting of the American Pediatric Society, the Arnold apparatus being used, a pint of water, a Bunsen burner, and fifteen minutes. The hood may then be removed and the cover left ajar. This is effectual for Pasteurization.

Dr. A. Jacobi objected to the statement that he has written extensively on infants' foods, "pro and con." He had never written any thing in their favor, but had always opposed their use. Sterilized milk was an improvement upon the methods he had formerly adopted. It was a great error to suppose that sterilized milk was any thing but cows' milk. It required just as much modification as though it were not sterilized. A good food was not one that was simply tolerated—one upon which a child did not die—but rather one upon which he would thrive. Many an invalid owes his ill health in later life to improper feeding in infancy.

Alkalinity in cows' milk was always suspi-
cious, for it was evidence that it had been "doctored." The most dangerous alkali was bicarbonate of soda, for in milk thus treated the ptomaine-producing germs developed best.

While pepsin was sometimes useful, the speaker objected to its indiscriminate use. Without an acid it was inert. The best remedy referred to during the evening was irritation of the colon. Not only did it remove decomposing matter, but furnished fluid which was so much needed, for some is absorbed.

Dr. S. Baruch said he had not prescribed pepsin without acid for ten years, and had not administered it to children for five years.

Dr. Jacobi said, still further, that sugar was required in artificial food, but he did not believe that milk sugar was best. There was a close relationship between milk sugar and lactic acid. The change from one to the other was very rapid. Some lactic acid was necessary for proper digestion, but an over quantity produced hyperacidity and indigestion.

Reviews and Bibliography.


The number of cases in the department of the Bicêtre relating to diseases of the nervous system, and coming under the care of M. Charcot and his worthy assistants, amounts each year to about five thousand. It is enough to say that they pass under the scrutiny of Charcot, and enough to say that such facts and principles as throw light on the physiology of the mind and the pathology and treatment of nervous diseases are given by assistants of his training, and under his supervision presented in this volume.

D. T. S.


The title of this work is a satisfactory indication of its contents. It gives a full history of the structural and hygienic arrangement of the part of the Bicêtre devoted to the care of idiotic, epileptic, and feeble-minded children, the clinical history of cases, the history of patients, the method and result of treatment, and the post-mortem appearances in cases where death occurred. The names of the physicians accompanying the report offer abundant guarantee that the work comes fully up to the most exacting standard.

D. T. S.

Correspondence.

**LONDON LETTER.**

[FROM OUR SPECIAL CORRESPONDENT.]

Dr. Klein on Grouse Disease; Poisonous Celery Seeds; Ichthyol; the Champion Pill-taker; Hospital Users and Hospital Subscribers; the Hospitals Association; the Oldest English Work on Midwifery; Cure of Ovariotomy During Pregnancy; a Forthcoming Congress.

Dr. Klein's new volume on grouse disease will find many interested readers, not merely among biologists but sportsmen. It is the result of exhaustive researches into the nature of the disease by one of our most competent bacteriologists, who has obtained material for his inquiries in the shape of numerous diseased grouse sent to him from all parts of the kingdom.

On account of the recent cases of illness caused by poisonous celery seeds which had been used as flavoring for various dishes, the public analyst for Paddington has made an analysis of the suspected seeds. The bottle from which a poisonous dose had been taken contained 3 ounces of seeds. Each of the others experimented upon 3 ½ ounces of seeds. The first bottle was found to contain in 10,000 parts by weight only 5 parts of celery seeds, the rest being henbane seeds. Another bottle in 10,000
parts contained 106, and the third 40 parts of celery seeds, all the rest being henbane, so that for practical purposes two of the bottles were filled with henbane seeds, the largest proportion of true celery only amounting to 10 per cent. The seeds were in bottles of dark-colored glass, so that the colors and form of the contents would not be noticed without taking them out. It is now considered that in gathering the seeds no mistake could have been made, the plants being so entirely different, and that the presence of so small a quantity of celery seeds was probably an accident. The twenty-four bottles which were found at the shop from which the original bottle was procured had no doubt been inadvertently labeled as containing celery seeds, as it is hardly likely to have been a matter of adulteration, else the celery seeds would certainly have formed a fair proportion of the whole.

Dr. Cranstoun Charles, of St. Thomas' Hospital, has published an interesting monograph, entitled "Ichthyl, a Contribution to its Therapeutics," in which he gives the results of three years' experience with this substance in burns, erythema, herpes, eczema, acne, etc., with more or less satisfactory results.

A dock laborer who was charged at a metropolitan police court with doing damage while drunk, and being in possession of several boxes of pills, somewhat amused the court by the following explanation:

The prisoner: "I bought the pills in the street of a chemist, I can't call him a doctor."

Mr. Marsham: What were you going to do with so many? Were you going to sell them again?

Prisoner: Sell them! No, take them. There is no man in the world takes more pills than I do. I could not get sober without a dose of pills, and I'm no sooner sober than I'm sprung again, and then there's more pills. Oh, I could never get on without my pills.

The prisoner was remanded for a week, the magistrate suggesting that he would be sober by that time without the aid of pills.

The Duke of Westminster has drawn attention to the fact that out of 1,300 houses in the neighborhood of St. George's Hospital, the residents of 900 give no support to that institution, and makes an appeal for financial help. At the present time the collection-box has been passed around the workshops and factories of the East End, a part of the collections of which it is pointed out will go to the maintenance of an institution the beds of which are in a great number of instances occupied by servants who have been moved from the mansions surrounding the hospital for gratuitous treatment, thus occupying beds which are really intended for the infirm and deserving poor. From the annual report for the year 1890, it appears there were 4,327 in-patients treated, of whom 49 are described as butlers, 124 coachmen, 109 cooks, 42 footmen, 53 grooms, 39 housekeepers, 138 house-maids, 51 kitchen-maids, 32 ladies-maids, 29 nurse-maids, 31 parlor-maids, 79 stable-men, 17 valets, other private servants 136, making a total of 929. It is asked if any grosser misuse of the word "charity" can be suggested, and if the wealthy shopkeepers of the West End and the nobility send their servants to hospitals, they should maintain the institution themselves without petitioning the public for the funds.

At the annual meeting of the Hospitals Association, held at Charing Cross Hospital, the secretary pointed out that among the practical results of real value were the National Pension Fund for nurses, the new Street Ambulance Service for London, while in the present year the question of the exemption of hospitals from rating was being dealt with. With regard to the pension scheme a bonus fund of nearly £40,000 had been raised to augment the amount of the pensions which the premium alone would have produced, and up to the present time more than two thousand nurses had joined the fund. As to the ambulance branch, since the establishment of the service the total number of cases removed from 50 stations was 2,101, giving an average per annum of 978 cases. A class had been formed from among cab-shelter attendants for instruction in first aid. It was also mentioned that House of Lords Hospitals Committee had come to the unanimous opinion that in general the system of administration of the hospitals in London was very good, but that they would be very sorry to see the individuality of the hospitals interfered with, be-
cause the rivalry which was promoted among them tended to their efficiency. As they had come to the conclusion that the hospitals were deserving institutions, and that they were not to any appreciable extent abused, the committee thought it was just as well to say so.

The oldest work on midwifery in the English language is said to be the Speculum Matricis, of Woolveridge, published at Dublin in 1670. A copy of this work exists in the Radford Library of St. Mary's Hospital, Manchester. It is dated "London, 1671."

Dr. Fancourt Barnes has recently had a successful case of ovariotomy during pregnancy. The patient, aged thirty-one, was the mother of five children, the youngest three years and a half old. She had noticed a lump in the right iliac fossa for fifteen months; the growth had rapidly increased. Dr. Barnes thought the general condition was obscure, but was of the opinion that pregnancy existed. The breasts showed no signs of pregnancy. The abdomen was enlarged by a large, irregular nodular mass, projecting most in the left iliac region, giving to the touch the sensation of a malignant growth. The uterus was pushed back against the sacrum and enlarged. The cervix was high up and softened. Upon opening the abdomen there was found a large multilocular cyst of the left ovary occupying the whole of the abdominal cavity. In places it was closely adhered to the intestines. Its contents were colloid material; it was multilocular. The adhesions had to be broken down before the growths could be drawn through the abdominal incision. Having transfixed the pedicle the cyst was removed. It was then found that the uterus was enlarged to four months' pregnancy. The temperature, which had ranged between 100° and 101° F before the operation, fell in two days to 99°. On the tenth day the stitches were removed, since when the pregnancy had gone on uninterrupted. Before the operation it was thought that the ascites, the rapid growth of the tumor and its nodular character pointed to malignancy. On the other hand the attacks of pain and collapse due to hemorrhage into the cyst suggested extra-uterine gestation, as there had been amenorrhea for three months, but the age of the patient and her general condition were against malignant growth, while the size of the swelling and its general characters were against ectopic gestation.

It is confidently expected that the forthcoming International Congress of Experimental Psychology, to assemble in the rooms of University College, will be a most successful gathering. A strong reception committee has been formed, and a lengthy and highly important programme issued. August 1st is the date fixed.

LONDON, June, 1892.

DUBLIN LETTER.

Etiology of Puerperal Eclampsia. A very interesting communication regarding the pathogenesis of puerperal eclampsia appears in the Centralblatt für Gynäkologie, under date of May 21st. A very severe case of eclampsia in the clinic of Kaltenbach, in Halle, terminating fatally, was microscopically and bacteriologically examined by Dr. E. Gerdes, with most interesting and suggestive results. The post-mortem examination showed changes in nearly all the internal organs; numerous hemorrhages in the pia mater, especially between the sulci; no edema; both lungs slightly edematous; in lower lobes light hypostasis, here and there patches of pneumonia; bronchial mucous membrane very much injected, and with a large number of small hemorrhages, as was also the tracheal mucous membrane. The liver was hard, not enlarged, the surface and section showing the "map" appearance; both kidneys parenchymatously degenerated, and showing large numbers of small hemorrhages. In stomach and intestines here and there were patches of hemorrhagic inflammations.

On microscopical examination were found embolisms of the pulmonary arteries consisting of the fat and liver cells, hemorrhages in the liver with necrosis and breaking down of the liver cells. Blood from the aorta, and portions taken from lungs, liver, and kidneys were bacteriologically examined. Agar-glycerin plates were prepared, on which, at body temperature, developed numerous colonies with distinctive characteristics, which under the microscope were seen to be composed of very short but
relatively thick bacilli; stained with an alkaline watery solution of methyl blue, these bacilli were stained a deep blue at both ends, the middle portion remaining unstained, one only slightly stained. The bacilli are inclined to grow into long threads, end to end, forming the so-called "pearl strings" when stained. This peculiarity of growth renders their recognition the easier, the individual members, on account of their extreme diminutiveness, being very difficult to recognize. For this reason the staining with methyl blue is imperative, the other aniline colors staining so deeply as to mask this peculiarity. In hanging drops the bacilli show a very lively power of locomotion.

A bacilli culture after fifteen hours' growth at body temperature possesses a very important virulence for mice and rats, though affecting the two in a different and very interesting manner. Mice, injected with 1/16 cubic centimeter of such a culture, intra-peritoneal and under the skin at the root of the tail, showed in a very short time efforts at vomiting, rapid respiration, the body often being doubled up in a knot. The head showed shuddering motions as seen in the frog after injections of strychnine; the animals scarcely move, having the appearance of being greatly fatigued, and then fall, almost without exception, into clonic convulsions, more rarely into tetanic. After about an hour of somnolence the animals regain consciousness, show a very marked indifference to move or eat; the respiration is difficult; seldom interrupted by convulsions, the symptoms become more severe, the respiration becomes slow, the bodily temperature rapidly sinks. Death closes the scene in this condition in from nine to twenty hours. A great number of white mice were so injected, and not one failed to so react. The effect of injections of morphine was then tried; 1/16 cubic centimeter of a two-per-cent solution of morphine was injected subperitoneally, and fifteen minutes later the injection of bacillus culture was made; at the same time a control mouse was injected with the bouillon culture alone. The latter reacted as had all the rest; the former failed to react. Smaller amounts of morphine were then used, producing a milder form of reaction, and on increasing the amount of morphine the mice were prevented from dying. All the dead mice were microscopically examined under the strictest precautions; in the abdominal cavity, in the blood and liver and kidneys the bacilli were found in numbers; the lungs and spleen appeared full. The toxic effect in mice is very striking. The efforts at vomiting are considered as being produced by the elimination of the toxic substance by the mucous membrane of the stomach, a fact which well finds an analogue in the vomiting and pain of eclampsia in the woman. The sleepiness and tiredness of the animals, interrupted now and then by clonic and tetanic convulsions, can, without forcing, be referred to the direct effect of the toxic substance on the nerve centers. This effect is paralyzed by the injections of morphine, as proved by the fact that bouillon cultures were not affected in their growth by the addition of morphine.

Rats, on the other hand, are also affected by injections of bouillon culture, though in larger, relatively larger doses. They do not show an immediate reaction, but very gradually become tired and lazy, the eyes close, the respiration becomes slower, the temperature sinks, and finally coma succeeds in about twenty-four hours. Blood and the serous cavities contain quantities of the bacilli. The kidneys, and especially the liver, showed bacilli en masse. In the rat the infectious character of the bacilli is the most striking. On account of the rapid proliferation of the bacilli the rat dies, while toxic effect plays a less important rôle. On returning after this experimentation to the microscopical examination of the eclamptic patient, it was only after many vain efforts that the presence of the bacilli in liver and kidneys was demonstrated.

The important question is next, if this bacillus dare be looked upon as playing an etiologic rôle in eclampsia, and the negative results of such examinations upon the part of other investigators be left out of consideration? Unquestionably this case belonged to the severest variety of the disease, and this may account for the presence of the bacilli in the blood and organs of the dead eclamptic. The identity of the bacilli found in liver and kidney and those of the culture is unquestionable; the virulence
of the culture for mice and rats, and the effect of injections of morphone on mice so infected, gives almost the right to believe that the bacillus would not be indifferent to the human organism. An exact bacteriological examination of all cases of eclampsia will first fulfill the conditions necessary to establish the etiological relations of a micro-organism as to the disease.

JAMES B. BULLITT, M. D.
ROTUNDA HOSPITAL, DUBLIN, JUNE 24, 1892.

Abstracts and Selections.

Therapeutics.—Alkalies in Universal Pruritus. Lange has found that sodium bicarbonate and lithium carbonate, combined with carbolic-acid compresses, have a very prompt effect in relieving universal pruritus. He refers to an extreme case in which the condition was improved in a few days, with marked relief in six weeks, and in three months hypnotics were unnecessary.

Benzine in Pediculosis. Nedzwiecki strongly recommends ordinary commercial benzine as the most effective, cleanest, and convenient application for destroying pediculi capitis or pubis. The affected parts should be freely bathed with the fluid for three or four minutes. Both pediculi and nits are killed almost instantaneously. As a rule a single application is sufficient, even in severe cases.

The smell of benzine is said to disappear very quickly. The remedy can be safely applied, even in the presence of an eczematous rash, since it causes only trifling pain, which soon passes off. The treatment must always be carried out in the day time, as the substance is extremely inflammable. (British Medical Journal, January 2, 1892.)

The Toxic Effects of Chlorate of Potassium. Dr. G. A. Fackler reports in the Cincinnati Lancet-Clinic the case of a boy, fifteen years old, who had taken one hundred and fifty grains of chlorate of potassium in a period of six hours. The most striking feature was a slight bluish discoloration of the skin, especially about the lips, nose, ears, and extremities. There was a slightly jaundiced appearance of the conjunctiva, abdominal walls not distended but painful on pressure, liver decidedly enlarged. During the examination the patient began to vomit, excruciating pain in the lumbar region followed, and the patient lay moaning, retching, vomiting, and, with the peculiarly discolored skin, presented a rather harrowing picture. The urine was voided with marked strangury and sparingly, and upon ex-

amination was of a peculiarly yellowish-red color, and found to contain albumen.

Sulphate of magnesia was administered, and four hours subsequently the patient had had profuse alvine discharges, slight dyspnacna was present, and there were a number of yellowish-brown maculae upon the side of the abdomen, the back, and anterior portion of the neck. Acetate of potassium, with tincture of strophanthus, was ordered. The symptoms gradually improved, and within five days had entirely disappeared, with the exception of slight pain in the epigastrum.

The best therapy for the future is to banish the remedy from our list of medicines, although it must be granted that in cases of throat affections and cystitis occasionally good results are witnessed. Still these results are wanting in a disproportionately larger number of cases. On the other hand, we have at our disposal a large number of substances which in their therapeutics value are not inferior to chlorate of potassium, and do not possess much toxic properties. It is especially advisable never to employ it as a medicine for children. (Archives of Pediatrics, No. 93, 1891.)

Poisoning by Gelsemium Sempervirens. Dr. Jepson was called upon to treat a woman, aged forty, who was suffering from neuralgia in both temples. He gave her tincture of gelsemium in ten-minim doses every two or three hours, and as no relief had been obtained after one day, he ordered double doses in a quinine mixture. She took three or four doses during the night. Next morning at eight o'clock she seemed better, but an hour later she was found in a very peculiar state. Though perfectly conscious, she had lost power over her tongue—could not protrude it, could not articulate, could only swallow with very great difficulty. Her pupils were widely dilated, and she could not see clearly. She could not write, but nodded in reply to questions. A hypodermic injection of strychnine (grain $\frac{1}{2}$) was given with excellent results. Ten minutes after it there was a return of power in the tongue and hands, and an improvement in the vision. After a second injection there was still further improvement; she took food and stimulants, and all paralysis disappeared. She had some return of the neuralgia and was very weak for a few days, but eventually quite recovered and enjoyed better health than for some time previously. (Practitioner, January, 1892.)

Pental, a New Anesthetic. Pental is a clear, colorless, thin, neutral, unirritating fluid, with a peculiar sweetish odor and taste. It is more inflammable than chloroform. It has been found to have a distinct anesthetic action without unpleasant after-effects. The narcosis is
not as profound as with chloroform, but it is sufficiently deep for the smaller and also larger surgical operations. Patients come readily under its influence in about four minutes, and its use is seldom accompanied by the unpleasant features of anesthesia by means of chloroform. Out of one hundred and twenty administrations of the drug there were serious though not fatal symptoms in one case. The drug was administered in an inhaler a few drops at a time, and every precaution used with chloroform was taken, narcosis was continued from forty seconds to eight and one half minutes. It seems possible that this anesthetic may find a place in practice, but a proper estimate of its value can only be made after it has been used in a larger number of cases. (Wiener Klin. Woch., Nos. 3 and 4, 1892.)

Chloralamide. Prof. H. C. Wood and Dr. David Cerna have studied the physiological action of chloralamide, and the results of their experiments indicate that the action of this drug upon the heart is so slight that it bids fair to be valuable as a hypnotic in cases of feeble heart, while its stimulating influence upon the respiration would seem to fit it for employment in cases of nervous exhaustion. The exact clinical value of a hypnotic can, however, only be determined by clinical study. After the use of it to a moderate extent, in various forms of insomnia, Dr. Wood considers it to be slower and less certain in its action than chloral. Rarely have unpleasant after-effects been noted, but he has seen in some cases distinct headache. It has been recommended by Hagen and Hudler as of especial value in cardiac asthma. (New Remedies, June, 1891.)

Lavage. In the Revue de Thérapeutie Medico-Chirurgicale for 1891, No. 18, p. 498, we find the method of Dr. Lienевич, who proposes to relieve the vomiting which follows the administration of chloroform by lavage. He believes that not only the chloroform, but also the irritation of the peritoneum produced by the antiseptics, is accountable for this symptom. He employs the tube of Faucher and washes out the stomach with warm water in which one half to one per cent of bicarbonate of soda has been dissolved, until the water returns clear. The abdominal walls are compressed (after an operation of laparotomy has been performed) during the washing. The results are excellent in that, if necessary, water sufficient for the needs of the patient can be left in the stomach. The general condition improves, because there is freedom from nausea, gaseous accumulations, vertigo, and epigastric distress. (The American Journal of the Medical Sciences, 1891, No. 290.)

Lactose and Glucose as Diuretics. B. Vespa has made a number of experiments as to the diuretic effect of lactose and glucose in various diseases. In the ascites of hepatic cirrhosis the diuretic effect was almost nil, and in acute and chronic nephritis it was hardly appreciable. In pleurisy with effusion, on the other hand, and in cardiac disease with disturbed compensatory action, the diuretic effect of lactose and glucose was most marked. As neither of these substances has any bad effect upon the heart or the nervous system they can be given at all times and in combination with any other remedy. They are well borne and do not cause nausea or other disagreeable effects.—Dr. Francis H. Williams, Boston Medical and Surgical Journal.

The Treatment of Uncomplicated Fractures of the Base of the Radius.—At the recent meeting of the American Surgical Association Dr. John B. Roberts, of Philadelphia, read a paper, arriving at the following conclusions:

1. Fractures of the lower end of the radius vary comparatively little in their general characteristics, because but one form is usual.
2. Muscular action has little or nothing to do with producing or maintaining the deformity.
3. Immediate reduction of the fragments is the essential of treatment.
4. Many of the splints devised for the treatment of this fracture have been constructed in ignorance of the pathology of the condition.
5. The ordinary fracture of the lower end of the radius usually requires no splint, and should be dressed with a wristlet of adhesive plaster or bandage.
6. When a splint is required, a narrow, short, dorsal splint, fixing the wrist, is all that is necessary.
7. The method of dressing here advocated is the best, because it annoys the patient little as possible by avoiding cumbersome appliances, and permits free voluntary movements of all the finger-joints.
8. Passive motion is unnecessary until union has occurred and the dressings have been finally removed.
9. Good use of the wrist and fingers is early obtained, and the anatomical conformation is restored as well as, and perhaps better than, by other more complicated dressings.
10. Old fractures, which have been improperly treated by omission of immediate reduction, may with considerable success be subjected to refraction at the end of six or more weeks. At later periods readjustment may be possible only by osteotomy, which is a legitimate means of treatment.

Dr. John H. Packard, Philadelphia, had in
1879 read a paper on this subject before the American Medical Association, in which he took the ground that the great difficulty in many of these cases arose from the non-reduction. If the fracture of the lower end of the radius commonly known as Colle’s fracture is once reduced, there is little tendency to reproduction of the deformity. Many physicians think that all that is necessary is to apply the proper dressing. The most important step in the treatment is reduction. He did not agree with the fifth proposition, that no splint is required. He employs an anterior splint padded to fit the curve of the radius and reaching to the ball of the thumb. The patient can use the fingers freely. In ordinary cases, proper care of the arm with this simple splint suffices.

Dr. Charles Porter, of Boston, emphasized the necessity for complete anesthesia, then complete reduction and breaking up of the impaction, and then the application of a posterior and anterior splint; after a week or ten days he allows motion of the fingers, and in two weeks motion at the wrist. He considers passive motion unnecessary except in old people, where there is a rheumatic or gouty tendency.

Dr. J. Ford Thompson, Washington, dwelt upon the disastrous results that often followed failure to reduce the displacement, or the use of improper dressings. After reduction of the fragments he applies an anterior and posterior splint, secured lightly to the arm. He had not found it necessary, as a rule, to use ether to accomplish reduction. In cases where there was severe pain following the application of the ordinary splint, instant relief followed the application of a plaster splint, the hand being carried well to the ulna side. In several cases where the hands were useless from the inflammation of the sheaths of the tendons, he had tried to break these up under repeated administrations of anesthetics, but the results had not been very marked.

Dr. Joseph Ransohoff, of Cincinnati, said that in some cases the reduction could not be effected so readily as had been described. He had had three or four cases in which extension would not overcome the difficulty, and in such cases hyper-extension has been resorted to. In the treatment he is partial to Levis’s splint. After a week or ten days passive motion is resorted to.

Dr. Charles B. Nancrede, of Ann Arbor, called attention to the fact that a certain amount of the bone tissue at the seat of fracture was destroyed, so that some deformity will necessarily follow. Reduction is the most important measure in the treatment. The fragments are then to be held in place by suitable apparatus.

**Fibroid Tumors of the Uterus** was the subject of a paper by John Homans, of Boston:

Fibroid tumors were defined as aggregations of normal uterine tissues in abnormal situations and masses. They may cause symmetrical or more or less one-sided enlargement. They may be in the walls of the uterus, or protrude toward its outside or toward its inner cavity. They may be incorporated with the uterus, or connected with it by a broad attachment or by a pedicle, or they may be entirely separated from it, and get their nourishment from the vessels of the omentum or mesentery. They may be dense and edematous, or filled with lymph-spaces, or they may in very rare instances be fibro-cystic. It is probable that a certain number of the tumors which have been described as fibro-cystic belong to the class of fibroids with dilated lymph-spaces. True fibro-cysts are very rare. In size these tumors vary from that of a mere dot to masses weighing fifty or more pounds. Their growth is slow. They are of common occurrence. In the past fifteen years the author had seen about five hundred and twenty fibroid tumors.

Operations to relieve women with fibroid tumors are rarely necessary. The writer had operated on only sixty of these five hundred and twenty cases—eleven per cent. The conditions which should guide us in recommending removal of the tumors are, when they threaten life by hemorrhage, when they are unbearable from their weight or the inconvenience they cause, when in a young woman they cause distress and shame from the alteration in her figure, when they cause much pain, when they cause serious obstruction of the circulation, or interfere with the action of the digestive or eliminative organs, when they cause obstruction of the bowels, or when their pedicles have become twisted, and sometimes the whole uterus becomes twisted on its axis.

Death by hemorrhage is rare. The speaker knew of only three instances. In fibroids complicating pregnancy, the tumor may threaten to render delivery impossible, but nature will generally get the obstruction out of the way if you give her a chance.

The solid fibroid tumors rarely have adhesions, and are removed without much difficulty. Of the fibro-cystic tumors the speaker had met with only eight in the five hundred and twenty cases. None of these were successfully removed. One woman recovered from an incomplete operation. The others all died. The author had reported an extraordinary case of twisting of the uterus as the pedicle of a large fibroid tumor. The uterus was twisted once and a half times on its axis. The case was fatal, no operation having been done.
The natural history of ninety per cent of fibroid tumors is to remain stationary after reaching a certain size, and after the menopause to become cretaceous and atrophied. About ten per cent require removal. The average age at which the speaker had operated was thirty-nine years.

Treatment by ergot alone is usually ineffective; combined with curetting it helps to stop hemorrhage. Treatment by high doses of electricity, a la Apostoll, sometimes stops hemorrhage, almost always relieves pain and gives strength, but rarely diminishes the size of the tumor. In four cases the speaker had practiced removal of the ovaries for the cure of fibroid tumors. In one woman, forty-four years old, the tumor disappeared in a few weeks, and menstruation at once ceased. In another, thirty-three years old, the catamens gradually ceased after three years, and the tumor remained about the same. In another, thirty-four years old, there was irregular recurrent bleeding for eight months after operation. A fourth case, thirty-six years old, was not at all relieved by the operation. He was inclined to regard this method as unreliable.

Curetting often cures the hemorrhage completely. This is followed by the application of tincture of iodine. The surgical treatment at the present time is almost wholly by removal of the tumor, with or without the uterus. If the tumor has been protruded into the cavity of the uterus, it should be enucleated and removed under careful antisepsis. Other tumors requiring removal must be removed by abdominal section. The operation may be finished in several ways. Sometimes the wound in the uterus can be closed by stitches or the pedicle may be treated by the extra-peritoneal method after constriction with the serrenard. Sometimes the stump is simply tied, as is the pedicle of an ovarian tumor, and then dropped. Sometimes the stump is turned into the vagina. All the different methods depend for their fundamental success on asepsis and on securing the vessels of the broad ligament, no matter in what way the pedicle or neck or body of the uterus is ultimately disposed of.

The condition of most patients from whom fibroid tumors have been removed is very comfortable. Some suffer from “hot flashes,” others grow very fat. A certain proportion, particularly those in whom the pedicle has been treated extra-peritoneally, suffer from ventral hernia.

Sometimes the bladder is cut off by the wire escureur, but in the only case he had seen the bladder healed in a few weeks by keeping it drained; and during the ten years that have elapsed since the operation, the bladder has been perfectly normal.

The length of the incision does not complicate the operation if there are no adhesions. Very rarely insanity follows the removal of a fibroid, as it does other surgical operations. The author had never seen this complication follow hysterectomy. He had seen two cases of tetanus in the case of other operators, but had had no case himself after hysterectomy. He had had one case follow ovariotomy.

He invariably sees that patients who have recovered from abdominal hysterectomy are fitted with a firm abdominal supporter, and impresses upon them the necessity of being careful about carrying heavy loads or straining themselves.

Dr. Vander Veer, Albany, said that in looking over his notes he had found that the age from thirty to forty-eight years had been most prolific in the development of these tumors. The hemorrhage, which is usually the symptom that attracts the attention of the patient, is dependent not so much upon the size of the tumor as upon its location. The hope that after the menopause is reached the fibroid will subside is not always verified. In some cases the tumor seems to take on a more active growth at this time. As to treatment, curetting, with packing with iodoform guaze, will often stop bleeding. When this fails in small fibroids, oophorectomy invariably cures except in soft myomas. The danger in treatment rests with the size of the tumor. It is the large ones that give the mortality after operation.

Dr. J. Irving Mears, Philadelphia, held that where the only reason for the removal of the tumor was the large size of the abdomen, giving rise to unpleasant remarks, we should not be guided by the patient's desire that the operation should be done. He related the case of an unmarried woman, who desired the growth removed on account of the distension of the abdomen which it produced. He refused, and she passed into the hands of another practitioner who did operate, the patient dying five hours later. Dr. Mears divided these cases requiring operation into two classes. We are justified in operating where the hemorrhage endangers life; and we are justified in operating when the pressure symptoms are such as to make life unbearable. There are, however, many cases in which, under palliative treatment, life may be prolonged, the patient rendered comfortable, and be able to enjoy life. He had found electricity palliative, but not curative. The tumor is sometimes reduced in size.

Dr. George W. Gay, Boston, spoke of the treatment of fibro-cystic tumors, and referred to the use of tapping. He reported one case in which he began tapping in 1879, repeating
it every two or three weeks for four years—ninety tappings in all were made. The patient is now in good health with a large abdomen, but has not been tapped for years. Other similar cases were reported.

Dr. Robert Abbeé, New York, referred to the value of the Trendelenburg posture and the early securing of the arterial supply of the uterus in these operations. He was rather surprised at Dr. Homans' assurance that death from hemorrhage was rare. He had thought the contrary. It is the symptom that frightens the patient and alarms the surgeon. He had had fair success with electricity, and would advise it in many cases. The tumor will grow but the hemorrhage will cease.

Dr. John Homans, Boston, said that the use of strong currents of electricity to the interior of the uterus caused some change to the mucous membrane, checking bleeding, but it did not prevent conception. It was his custom to advise patients with fibroid tumors not to marry. Cases bearing upon this point were related.

Injuries to the Spinal Cord and Its Envelopes without Fracture of the Spine.—Dr. N. Senn, of Chicago, chairman of the special committee on programme for the sixth annual meeting of the National Association of Railway surgeons, reports the above as one of the topics for consideration.

1. History.
2. Experimental Research.
3. Anatomical Landmarks.
4. Spinal Localization.
5. Diagnosis from the Standpoint of the Neurologist.
6. Pathology and Pathological Anatomy.
7. Prognosis.
8. Treatment.

Each of these sub-heads is to be considered in a thirty-minute paper, after which the subject will be open to discussion by the entire Association, with the best talent in the Association leading, and in this way it will systematically dispose of this perplexing subject in a scientific manner, and collect together a volume of material of inestimable value both to surgeons and railway companies.—Journal American Medical Association.

Case of Balanitis in a Child Aged Three Years.—On February 10, 1891, I was called to a child aged three years and a quarter, suffering from some affection of the genitals. The child has a left inguinal hernia, for which it wears a truss. He had not been vaccinated on that account. His left arm had been fractured on two occasions. The anterior fontanelle is not completely closed. The mother stated he had slept with the truss on for two nights. On Tuesday, March 5th, the child was pained and "swelled." On Wednesday he had difficulty in passing urine. He was restless at night, complained of thirst, and had no appetite. His head and face were swollen. A quantity of thick milk-white matter came away from the penis, and he could make water; after this the symptoms began to lessen. On examining the penis I found the thick whitish discharge oozing out of the point of the penis, the glans was swollen, and the skin over it reddened. The prepuce was seen to be red and inflamed. On inquiry I ascertained that a relative, who suffers from a discharge owing to chronic cystitis, had been in the habit of nursing the child when he came in, and being dressed as children of such years generally are, the child's penis must have come in contact with some of the discharge, and the infection have been set up in this way. There was no other reason to account for it. Any dirty discharge will set up similar inflammation in a young subject, not to mention gonorrhrea. With local and general treatment the balanitis soon got better, the only complication being an attack of vomiting and purging one night.

The case seems to me worthy of being placed on record because of its rarity, and as a warning to those having any chronic discharge not to nurse or fondle infants.—Dr. J. W. Martin, London Lancet.

Dr. Holmes in Praise of Preventive Medicines.—Dr. Oliver W. Holmes has always been a keen admirer of the hygienic functions of medicine. He is still firm in that opinion. From a letter of his, bearing date of May last, we borrow the following sentence: "I am an out-and-out believer in preventive measures against diseases as contrasted with what are called curative agencies."

In praising hygiene at the expense of medication, Dr. Holmes is simply commending the bridge that carries him safely. All his life long his need for drugs has been kept down to the minimum by reason of his prophylactic watchfulness. His physique, even in his green and salad days, was never so robust as to warrant any but the simplest courses of life. The laws of simple living having become ingrained he can neither tolerate nor command the potent potions of the pharmacy.—Journal American Medical Association.
A BOOM IN LAPAROTOMIES.

The woman-spaying craze, which any time in the last decade would seem to have been sufficiently protested against by conservative men in medicine on both sides of the ocean, appears to be epidemic just now in America at least. Many women with normal pelvic organs are daily unsexed by adventurers in surgery, and there is likely to be no surcease of this lamentable practice till the diagnosis of painful pelvic troubles can be brought out of the obscurity which now surrounds it.

Some time ago the London Lancet, in commenting upon the fondness of the average American surgeon for ovarian extraction, said, that while there was in pelvic surgery undoubtedly a field for Battey’s operation, it begged leave to suggest that the field was not a prairie.

In a similar vein of humor, but with the same solemn object in view, the British Medical Journal of June 18th thus delivers itself on this gruesome theme: “There is at present a big boom in laparotomy in the United States. In New York an ‘eminent’ hand reported 200 laparotomies performed by himself last year. A country doctor reported 35 in one year, and a young doctor, in a town of three thousand inhabitants, compiled the respectable total of 72 in seventeen months. One operator in Detroit thinks nothing of two laparotomies a day, and lately made a break of three. Rival laparotomists compete with each other, and if statistics are to be trusted, such hecatombs of ovaries must be offered on the altar of the New Surgery as well might make American patriots feel some anxiety about the population question.”

If this wholesale destruction of ovaries continues much longer the social economist will doubtless be compelled to institute some political measure for its abatement. It might seem hard to rule the young would-be eminent operator out of a field where apparently big surgery may be done without experience or great skill, and with next to no danger of fatal results; but there can be no question that the good of humanity would be subserved in such legislation as would secure a woman against the loss of the most essential of her sexual organs, until it should be demonstrated before a committee of experienced diagnosticians that they are diseased beyond cure and must be condemned to the knife.

In the mean time the ambitious young surgeon should confine his operations to the spaying of sows, or the castration of roosters, and thus acquire a steadiness of hand and deftness of touch that will give grace and elat to his work when some fit case shall come under his manipulation.

A NARROW ESCAPE.

Some three years ago the world was treated to a sensation in the announcement that Bishop, the mind reader, had, in one of the trances to which he was subject, been cut to pieces after the manner of the post-mortem dissector. The public, who can be made to believe any thing, believed the report, but to the mind of any man who ever had ought to do with matters of the dead-house nothing could be more absurdly ridiculous. The medical journals and medical men said so, but nevertheless legal proceedings were instituted against the alleged offenders, with results that, in one case at least, have just missed being serious. The Boston Medical and Surgical Journal, July 7, 1892, says: During the past week Dr. John Irwin, one of the physicians who conducted the autopsy upon the
THE AMERICAN PRACTITIONER AND NEWS.

The American Society of Andrology and Syphilology met this year at Richfield Springs, N. Y., on June 21st. The officers for the ensuing year are, Prof. E. R. Palmer, of this city, President; Dr. L. Bolton Bangs, of New York, Vice-President; Dr. J. A. Fordyce, of New York, Secretary; Dr. J. P. Bryson, of St. Louis, Member of the Council, and Dr. W. Taylor, of New York, Delegate to the Congress of American Physicians and Surgeons. A large number of valuable papers were read by men of such prominence as Keyes, Waston, and Taylor. Prof. Palmer, President elect, read a paper on sexual hygiene. His many friends, patients, and pupils will be happy to hear of this his latest and well-earned honor.

Dr. John A. Ochterlony, the eminent Louisville physician and professor, has had recently conferred upon him the degree of Doctor of Laws by the University of Notre Dame; this, with the decoration of Knighthood, conferred by the King of Sweden last February, will doubtless be esteemed honor enough for a half year. Our genial and accomplished colleague has our hearty congratulations.

Notes and Queries.

Physiology in the Public Schools.—In the report of the Massachusetts State Board of Education, recently issued, Mr. G. H. Martin comments upon the teaching of physiology and hygiene under the law of 1885. This law had special reference to the effect of stimulants and narcotics upon the human system, and the instruction was expected by some of the promoters of the law to inculcate in the youthful mind an abhorrence of intoxicating liquors. Mr. Martin arrives, among others, at the following conclusions: The outcome in accurate knowledge resulting from much of the work done is meager, and out of proportion to the time spent upon it. Many false impressions are left in the minds of the students; physiological details are not suited to young children. However defective the system of instruction may be, the sentiment of the schools is sound; the conviction that alcohol and tobacco are bad things to use seems universal. Where exaggerated notions of the effects of stimulants have been acquired, there is danger of a reaction of sentiment in the light of after-knowledge. Among the suggestions which he makes are, that teachers prepare this subject with more care and see that their statements are true, and by frequent tests ascertain that their teaching is properly comprehended, and that the use of text-books should be limited to the older pupils. The moral and social effects of the abuse of intoxicants should be made more prominent, and abstinence be advised for other reasons than such as concern only the body.—Boston Med. and Surg. Journal.

Too Long Vacations.—Prof. Charles F. Thwing, in the North American Review for June, arraigns the present system of summer vacations as being too long. The college student suffers from so long a vacation through the loss of interest in his college work. His attention for a whole quarter of a year is directed to pursuits other than scholarly. His discipline is broken. He feels himself to be on a vacation, and vacation is usually intellectual vacuity. The vacation becomes dissipation—moral, intellectual. Forces that are needed in college are not recruited. Hardihood, endurance, concentration, pluck, grit are not nursed through so long a period of inactivity. Laziness is the direct result of summer listlessness.

Recreation does not become re-creation. The daily newspaper is the strongest intellectual fare, and the severest physical work done is playing tennis. Professor Thwing thinks that if the student were to have only a month of such a kind of life, it would be well, but to
stretch out these methods over three months is bad. Resting is one thing, and a very good thing, but resting prolonged becomes rusting. Rusting eats the tool not used. Students, like tools, lose as much by August rust as by February wear. Let every student have all the rest, recreation, diversion, and amusement required for keeping his forces in the best condition, but he does not need one fourth of the year. A healthy student can get as much vigor out of two months as out of three. Eight weeks in the woods will give all necessary power quite as well as thirteen. A short vacation is better for a tired and healthy man than more, than a long one spent in laborious diversions. By transferring five weeks from the vacation to the working period of the college, and by a little extra work, we might cut the college courses to three years without a serious shortening of the time spent in study, and also without any depreciation of the worthiness of the course itself.

The evils of the long vacation are more conspicuous in the pupils of the common schools than in college students. These pupils are of the common people. More of them have parents whose purses are small than parents whose bank accounts are large. They spend their summers at home. They indulge in no outings more expensive or prolonged than a visit to some relative for a fortnight, and their long vacation is no more recreative to jaded energy than a short vacation, and it is far more fraught with physical and ethical perils. Lawlessness is often characteristic of boys in vacation. They return to their books in the middle of September, not with an appetite whetted by proper abstinence, but with a distaste created by a barbarian life. Every teacher knows that at least a month is required to restore his classes to as good a working condition as was theirs at the close of school in June.

Professor Thwing regards the ordinary thirteen weeks as too long a vacation even for the teachers and professors, who would find nine weeks sufficient in which to recruit for their work. There will, however, be exceptions, for to many teachers in the colleges the vacation is the occasion for doing work other and harder than that of the college routine; and as a general thing it may be said that "no class of professional laborers are more laborious, none more deserving of long periods of rest than the teachers; and of all teachers, those in the public schools are most laborious and most deserving."

On one point there can be no disagreement; the relatively short vacation of the doctor is not half long enough to give him the rest and recreation which he needs. An absence from home and from work of three months once in twenty years would be a boon to many over-worked members of the profession who hardly ever lay aside the harness even for a day. But vacations must be had, and if they are destined to be short they must be frequent—vacations which shall be characterized by absence of all fretting and worrying about loss of time and loss of income, or atheroma from cankerling care and parenchymatous degenerations will come all too soon.

The evil with the medical profession then is too short vacations and too few of them. —Ibid.

The Harvard Medical School Association has issued an interesting and valuable list of its members, which it will be glad to send to graduates of the Medical Department of Harvard University, in whatever part of the world they may be. The Association was formed about one year ago, and all graduates of the School are eligible to membership. The object is to unite all alumni and to advance the interests of the School and of medicine. The entrance fee and the annual assessment are merely nominal.

Pure Boron.—M. Henri Moissan submitted to the Academy of Sciences last week an important essay on the preparation of pure boron. Magnesia mixed with an excess of boric acid, and heated, gives a mixture of boron, borate of magnesium, and boride of magnesium. By successive washing in acids the borate and the greater part of the boride are eliminated. By the fusion of the remaining boric acid the residue of the boride is oxidized, and, after washing, pure boron is produced. In another paper M. Moissan showed that when boric acid
is treated with sodium or potassium great heat is given off, and owing to this heightening of temperature the greater part of the boron unites with the excess of alkaline metal. When the compound is subsequently treated with water and hydrochloric acid, a mixture is obtained (after desiccation) composed of boron, borate of sodium, boride of iron, hydride of boron, and hydrated boric acid. This mixture, M. Moissan pointed out, had hitherto been regarded as amorphous boron.—Paris Corresp. of Chemist and Druggist.

Vaccination Injuries.—A typical case of an allegation as to injury and death brought about by vaccination has occurred at Oldbury, where a coroner's inquest was held to inquire into the circumstances. The father held that the child had not been well since its vaccination, but the mother frankly admitted that before its death the child's vaccinated arm had been well for no less a period than one month, and that for some weeks it had failed to take its nourishment properly, in consequence of which she put it out to nurse with a neighbor. The medical evidence was to the effect that the infant was not properly cared for, that it did not receive proper diet, and that it died in a convulsive fit. The suggestion of Mr. Grant, who represented anti-vaccination principles, was to the effect that vaccination must be regarded as an indirect cause of death. Indeed, it seems to be a creed of that party, that if subsequently to vaccination any harm occurs, then post hoc ergo propter hoc must apply; but if any good comes, whether by way of saving life from smallpox or otherwise, the results are quite accidental, and are not worth recording. London Lancet.

There are a large number of causes of disease for which society is responsible and from which individuals suffer. Only National, State, and municipal authorities have power to rectify these conditions. Is there any more legitimate office of government than the protection of public health? We are tempted here to quote the Declaration of Independence and the Constitution of the United States. To secure the right to life, firstly, governments were insti-
tuted—the right to life to ourselves and our posterity. But what is the comparative public expenditure for sanitary purposes? The best ability is permanently employed to adjudicate rights to property; who is retained to protect rights to health? Numerous legislative and executive departments are formed for various purposes; where are the departments of hygiene? We beg our readers to ask people if they are really solicitous for the public health? And let it be seen and known of all men that the profession is not indifferent on this subject.—Massachusetts Med. Journal.

The Advertisers in the Journal.—The Review again feels it a duty to publicly denounce the character of many of the advertisements that at present pollute the pages of the Journal of the American Medical Association. The Journal has recently been vigorously assailing Dr. Keeley's alleged cure because of its secrecy, and with perfect effrontery displays at the same time to its readers the cards of various proprietary preparations that are more decidedly secret than Dr. Keeley's nostrum. Of course the editor will disclaim any indorsement of these articles, but he knows that they are a distinct injury to the profession; he knows that by advertising them he increases their sales and thereby increases the injury they work; he knows that their use is opposed to the spirit and the letter of the Code that governs him and all members of his Association, and that should certainly govern the official journal of that august body, and yet he pleads the false and cowardly excuse of irresponsibility. When Tongaline, Febrina, Cacitina Pellets, Freigh's Tablets, Antikamnia, Quickine, Clemina, and a swarm of other secret nostrums are weekly paraded before the eyes of the profession in this official organ, it is high time to utter an indignant protest. Pittsburgh Medical Journal.

Deaths of Eminent Foreign Medical Men.—The deaths of the following distinguished members of the medical profession abroad have been announced: Dr. Carl E. Lenz, consulting member of the Russian Medical Council, at the age of seventy-one. He
had traveled much and had lived for some time in Alaska. He was Russian delegate to the Cholera Conferences in Constantinople in 1865, and in Vienna in 1874. Among his literary works was an important abstract in Russian of Hirsch’s Pathological History and Geography. Dr. Ludwig Marovski, of Odessa, formerly professor in Kharkoff.

VITALINE.—A good deal has been heard of this quack preparation in Russia recently. It was concocted by one Gatchkowsky, and was advertised as a miraculous panacea and rejuvenator. In spite of its exaggerated claims, the tide of fashion turned toward it, and it became a popular fad. It was given both by subcutaneous injection and internally. Finally General Gresser, the Prefect of St. Petersborg, and a very important personage, was given an injection of it, from the effects of which he died. The inventor was immediately seized, and finding himself in danger, confessed that his specific was only a mixture of borax and glycerine, and that the death must have been the result of a dirty syringe.

THE GRADY HOSPITAL AT ATLANTA.—This hospital, which was erected as a memorial to Henry W. Grady, was opened in Atlanta, Ga., three weeks ago. The city appropriated $15,000, the rest was raised by private subscription.

SPECIAL NOTICES.

AN INTERESTING OBSERVATION, BY PROF. MARIUS ODIN, M.D., NICE, CHEVALIER OF THE LEGION OF HONOR, ETC.—Madame de G., of Austrian nationality, twenty-five years of age; married; no children; average constitution; lymphatic temperament. I was struck at first sight with her pulsat. Her skin and the mucous membrane of her eyelids and lips were quite colorless.

This young woman complained of weakness and general atony, cephalalgia, dizziness, vertigo, tendency to lipotymia, caused by sorrows, sitting up late at night, and generally depressing influences. There was gastralgia, with alternate constipation and diarrhea. Menstruation was irregular, and an abundant leukorrhea was accompanied with gastralgic exacerbation. Her pulse was weak and depressing. There was a blowing sound with the first heart-beat; very accentuated in the carotids. On auscultation I found weak respiratory murmurs, much prolonged expiration, dry and jerking cough. There was insomnia, and a tendency to night sweats.

Every thing had been tried. Tonics of all sorts, arsenic, iron, quinquinia could not be borne. Hydrotherapeutics had given no results.

I prescribed for Madame de G. the vin mariani erythroxylon coca, from which I had had much satisfaction on several previous occasions, but which I had never used alone.

Want of appetite being one of the chief symptoms, and this keeping her general condition at a low ebb, I gave her a few doses of rhubarb, which, however, modified the situation but little. From that time I prescribed the vin mariani in doses of a claret glassful, morning and evening, a quarter of an hour before meals.

At the first doses she complained that it increased her dizziness. I assured her that this was a salutary and even necessary first effect of the medicine, and she consented, not without reluctance, to continue its use. At the end of eight days there was a notable amelioration. Appetite appeared, food was taken, and the digestive functions were becoming more regular day by day. I then advised the patient to increase the dose by two more glasses per day, either after meals or between, whenever she had to undergo some exceptional fatigue.

Madame de G., who has since then resumed her daily occupations, tells me that, thanks to the medicament taken at proper times, she can bear without fatigue long conversations, and at the same time her vocal powers have acquired ampler development. At the end of a month’s treatment her state was most satisfactory. There remained a slight blowing with the first heart sound, which, however, was disappearing, and was not at all perceptible in the carotids any more.

This observation seemed to me very interesting and conclusive in this respect, viz: that it shows the action of vin mariani when administered without any other medicament, and, what is no less interesting, it shows its useful effects upon the vocal organs—a fact first determined by the eminent specialist, Professor Charles Fauvel, who has given to it the name of "Tensor of the Vocal Cords."—Gazette de Therap.

"Coca" has maintained its reputation as a powerful nerve stimulant, being used with good results in nervous debility, opium, and alcohol habit, etc. The highly variable character of the commercial drug makes it uncertain, however. Robinson’s Wine Coca (see this journal) we believe to be a uniformly active article, it being prepared from assayed leaves, the percentage of Cocaine being always determined by careful assay.

The true summer drink should contain real nutritive properties to compensate for the exhaustive waste of perspiration, and counteract the weakness and relaxing effects of excessive heat. For interesting reading on this subject, see the article "A Refreshing Tonic and Reconstructive" in this issue.

ABBRASIONS—CUTANEOUS DISORDERS.—This antisepic adhesive ointment protects the surface of the wound, and is of especial service in dressing wounds of the face, and valuable in cutaneous eruption, excoriation, and ulceration:

R. Zinci oxidi .......................... grs. v; Zinci chloridi .......................... grs. xx; Gelatine .................................. \( \frac{3}{2} \) vi; Listerine .................................. \( \frac{3}{7} \) vii. M.

The gelatine to be dissolved in the listerine by aid of gentle heat.
Original Articles.

THE ETIOLOGY OF CROUPOUS PNEUMONIA.*

BY SIMON FLEXNER, M. D.
Fellow in Pathology, Johns Hopkins University.

The view entertained by some of the older clinicians, that croupous pneumonia is not to be regarded as a purely local inflammatory affection, but that it presents the features of a general infectious disease, has received full confirmation in the last ten years. The study of croupous pneumonia, with the aid of modern bacteriological methods, has furnished us with the peculiar micro-organism constantly associated with this disease and now believed to be the causative agent concerned in its production; and observations on and experiments with this organism cultivated outside the human body have supplied us with a knowledge of many important properties possessed by it. Moreover, we have been afforded an insight into the nature of croupous pneumonia, as it is encountered in human beings, of great practical value.

This paper is intended to present in brief form the present status of the micro-organism believed to be the cause of croupous pneumonia; to describe its most salient features; to treat of the lesions which occur in the tissues in consequence of the entrance and multiplication of the organism in the body (whether human or animal, natural or experimental), and finally, to consider the question of the cure of the disease and the production of immunity. On account of its extent all parts of the subject can not be treated with the same fullness, and in dealing with the subject the greatest stress will be laid upon that portion of the paper which is a record of the most recent contributions to it, and also the observations of the writer.

It is a matter of historical interest to recall that as early as 1875 Klebs described certain micro-organisms, which he had obtained from croupous pneumonia, as "Monas pulmonalis." The methods employed for obtaining and studying such organisms at that time were necessarily imperfect, and hence no other value attaches itself to the discovery. Eberth, in 1880, saw in the tissues from a case of pneumonia certain organisms which he described as occurring in pairs; and he found what appeared to be the same forms in the purulent meningitis which complicated the case. Koch, in 1881, photographed diplococci, which he obtained from the lung in pneumonia complicating relapsing fever. Friedlander, in 1888, described his well-known bacillus, which he obtained from a small number of cases of croupous pneumonia, and which he regarded as the cause of the disease. As this organism is now known to occur exceptionally only in croupous pneumonia, and its causative role is denied altogether by many competent bacteriologists, nothing more need be said of it here.

The micro-organism constantly associated with croupous pneumonia was first seen and studied by Sternberg in 1880, although its significance was not appreciated by him at that time. The first published description of it was by Pasteur, who found it in the saliva of a child suffering from hydrophobia. It was not until 1885 that Sternberg, in an address before
the Philadelphia Pathological Society, said: "It seems extremely probable that this micrococcus is concerned in the etiology of croupous pneumonia. . . . But this can not be considered as definitely settled by the experiments which have thus far been made upon the lower animals." A few months later A. Frenkel observed in the expectoration of patients with lung affections, and especially in the rusty sputum of croupous pneumonia, peculiar organisms which proved to be pathogenic for various animals. Frenkel succeeded a little later in obtaining pure cultures of these organisms from the hepatized lungs of persons dead of pneumonia, and he stated that they probably were the causal agent of this disease. The organism has received a number of names: Microbe septiœmique du salive (Pasteur); Cocccus lanceolè (Talamon); Micrococcus Pasteuri (Sternberg); Pneumococcus of Frenkel; Diplococcus pneumoniae (Weichselbaum); Bacillus salivarius septieus (Flügge); Streptococcus lanceolatus Pasteuri (Gamaleia), and Sternberg has just proposed for general adoption the designation "Micrococcus pneumoniae curvus."

At the present time it would seem to be superfluous to give all the arguments which could be adduced to prove that the diplococcus pneumoniae is the cause of acute lobar pneumonia. Suffice it to say that the postulates of Koch have been fulfilled in this instance as completely as it is possible to do so in a disease which is unknown among the lower animals, and in man it is evident that experimental inoculations can not be practiced. The diplococcus pneumoniae is invariably associated with acute lobar pneumonia; it can be obtained from the local lesions of the disease in the lungs, and from many of the recognized complications of the disease; it can be cultivated outside of the body; but so far no opportunity has been afforded for the demonstration in man of the remaining postulate of Koch, the reproduction of the disease by inoculation.

The peculiar susceptibility of the lower animals used for experiment, such as the mouse, rabbit, and guinea-pig, to inoculation with the diplococcus pneumoniae does not lead to a localized infection with secondary involvement of other organs as in man, but to an acute septi-

emia, from which the animals rapidly perish. But it is to be noted that this organism displays different degrees of virulence, and the course of the infection occurring in rabbits is subject to certain modifications which make the resemblance to the human disease more evident. Before taking up this subject in more detail, a few words about the organisms themselves.

The diplococcus pneumoniae occurs in the form of oral or lancet-shaped diplococci, sometimes seen singly, and not infrequently in short chains of either five or six. The single cocci, diplococci, or short chains are surrounded by a capsule, which consists of a highly refractive material having some resemblance to mucin. This capsule is present only when the organisms have been obtained directly from the body, and never occurs in artificial cultures. These organisms demand the most carefully prepared culture media in order that they may be grown outside the body; and they are so little adapted to this mode of existence that it is only after several generations of saprophytic development that they show an abundant growth in our culture tubes. The duration of life of the organisms in culture is very short; they may be dead after two days, and hardly ever survive ten days without transplantation or inoculation of animals. But what particularly characterizes this organism is its variable virulence. A highly virulent organism may suddenly lose its effect wholly or in part, and a less virulent organism may become intensified by being passed through the bodies of susceptible animals.

According to the observations of Netter, the diplococcus is an inhabitant of the oral cavity of at least twenty per cent of healthy persons, and is present in many of these cases possessing great virulence. This fact is in accordance with what we know concerning the sudden development of the disease after exposure or other debilitating influences; and we can imagine conditions in which the organisms shall obtain a foothold in the body on account of increased virulence on their part without demonstrable diminution of resistance on the part of the host. With reference to the contagiousness of the disease the well-known occurrence of house epidemics is to be considered.
If a rabbit be inoculated subcutaneously with a pure culture of the diplococcus pneumoniae of virulent nature, there will be little or no local reaction at the seat of inoculation, but a general infection will ensue, and the animal may die in twelve hours, although twenty-four hours is more usual; and cultures that kill rabbits in forty-eight hours possess great virulence. At the autopsy the blood will be found teeming with bacteria, the spleen will be swollen, the lymphatic glands enlarged and hemorrhagic, the liver and kidneys cloudy and swollen; in a word, the picture of an acute septicemia will be presented. If the culture has been less virulent, the period of incubation, measured by the duration of life, will have been longer, fewer organisms will be present in the blood, and the general changes will be less severe. In this class of cases it is not uncommon to have an entirely new set of phenomena appear, namely, an acute fibrinous inflammation of the serous surfaces of the body. Instead of a vigorous general process, there is an acute fibrinous peritonitis, pleuritis, or pericarditis; and with the pleuritis actual consolidation of the lungs may occur. But whereas fewer bacteria are found in the blood in these cases, the exudate will be crowded with them. In still another set of cases the process remains localized to the seat of inoculation, an abscess is formed, which may extend into the adjacent tissues, and the animals ultimately die, or recovery may take place after a long illness. In the last cases, even though the animal die, few or no organisms are found in the blood, while the local process still contains them. In all cases the production of fever is the earliest as it is a constant accompaniment of the inoculation.

We will turn our attention now to the pathological changes found in the lungs and other organs in human beings in croupous pneumonia, and compare these with the alterations present in rabbits dead of the experimental disease, and consider the confirmation of the causative part played by the diplococcus as indicated by this comparison. Acute lobar pneumonia, or croupous pneumonia, is a disease in which the parenchyma of the lungs, the air vesicles, infundibula and terminal bronchioles are affected. The larger bronchi are unaffected, and the interstitial lung tissue nearly so. The disease is characterized by congestion, the transudation of serum from the blood-vessels, the diapedesis of red blood corpuscles, the migration of large numbers of leucocytes, and the conglutination of a part of the exuded plasma with the production of fibrin. These structures serve to fill the air vesicles and other structures mentioned. In most cases the local disease is limited to the lungs, the blood does not contain the organisms causing it, and the other organs of the body do not suffer on account of the presence of the organisms themselves within them.

There are other cases, however, in which certain complications occur, such as peritonitis, pericarditis, endocarditis, and meningitis; and the organisms are found in the exudate in the affected parts. We have seen that where similar conditions occurred in animals it was an evidence of lessened virulence on the part of the producing organisms, and experiment has taught us that the diplococci which are contained in the inflammatory exudates which sometimes complicate croupous pneumonia are not so virulent as those found in the lungs. There is a variety of croupous pneumonia, the asthenic type, in which either because of diminished vitality on the part of the patient, or extraordinary virulence of the organisms, the blood is invaded by the bacteria.

We are prepared then for the statement that there is no essential difference in the pathological changes provoked by the diplococcus pneumoniae in lower animals, and the natural disease occurring in man in consequence of the entrance and multiplication of this organism in the lungs. Moreover, when the finer changes are studied, as they occur in the tissues of both man and animals dead of pneumonia, a further confirmation of the identity of the two processes is obtained. The study of the organs obtained from human beings and animals which have succumbed to the diplococcus infection, which I wish to report, is not yet completed. But sufficient has already been learned to warrant the statement that they have much in common.

The source of the organisms which have been
used in the experimental part of this study were (1) from the rusty sputum of pneumatic patients; (2) from the lungs of those dead of pneumonia; (3) from the pericardial exudate in acute fibrinous pericarditis complicating pneumonia. The gross anatomical lesions which were observed differed somewhat, depending on the virulence of the organisms inoculated, in compliance with the description already given of the several types of the experimental affection. The most virulent cultures used did not kill rabbits in less than forty-eight hours. Yet in these cases the process was general in nature. There was a slight reaction only at the seat of inoculation.

In the small purulent focus, however, the characteristic diplococci were found. (Welch.) Around the seat of inoculation the tissues were edematous, there were subcutaneous hemorrhages, and the glands in the inguinal and axillary regions were greatly swollen and ecchomotic. On the side opposite the inoculation the glands were not so much affected. The peritoneal cavity in these cases presented no remarkable appearance, neither did the pleural cavity. The liver and kidneys were congested and cloudy. Besides the simple parenchymatous alterations the liver exhibited here and there on its surface yellowish-white lines and dots, often surrounded by a zone of hyperemia, and extending into the substance of the organ. The spleen was enlarged, sometimes greatly so, and was either soft or hard. The lungs showed areas of congestion at times, but no consolidation. The deeper glands of the neck and elsewhere were swollen and reddened; the heart apparently was normal. The blood in these cases contained myriads of organisms; the spleen and other organs and even the bile contained them.

The next series of cases, corresponding to a weaker activity on the part of the diplococci, occasioned in some instances peritonitis, pleuritis, and pericarditis. In other instances the duration of life of the animal was prolonged without the serous inflammation ensuing. The lesions in these cases differed from those stated above only in being less intense, and the largest numbers of organisms were present in the local exudation. In the last class of cases there was no general infection of the body; the serous surfaces were not involved, but the process remained localized to the seat of inoculation, producing there an exudation containing the same elements as those found in the lungs in human pneumonia, and the organisms were recovered from the local inflammatory focus. (Welch.)

The microscopical lesions will be described briefly; and as they are much the same in the different cases, varying in degree chiefly, one type only will be given.

**Lymphatic Apparatus.** The blood-vessels contain numerous diplococci, and masses of them are present in the tissues. There is hyperplasia of the lymphatic tissue, and hemorrhages into the glands are observed. There is, besides, necrosis of lymphatic elements; the nuclei of the necrotic cells have suffered fragmentation, and there is a tendency of the process of cell death to be focal in nature.

**The Lungs.** In the cases of septicemia infection these organs show but little besides circumscribed hemorrhage and the presence of large numbers of the diplococci. In the less virulent types there may be areas of consolidation, with the presence of leucocytes, fibrin, and red blood corpuscles. If the organisms be injected directly into the lung substance, or introduced into the trachea, actual consolidation often results.

**The Heart.** In all cases a marked and in some instances an extreme fatty degeneration of the myocardium is encountered.

**The Liver.** The organ is full of blood, and the liver cells highly granular and fatty. The yellowish-white foci, seen with the naked eye, are observed to be areas in which the liver cells are dead. The liver cells composing these areas are hyaline in appearance; they are without nuclei, and the refraction of the tissue is increased in these places. Many polymnuclear leucocytes are found to have wandered into these foci of dead liver cells, and of these not a few have themselves undergone necrosis. The capillaries of the liver contain the organisms.

**The Spleen.** In many respects the changes in this organ are the same as in the lymph glands. There has been a hyperplasia of lym-
phatic tissue, but the swelling is chiefly due to the dilatation of the blood-vessels which are gorged with blood, and the hemorrhage which has taken place in the tissues. A necrosis of cells, such as is observed in the lymph glands, is met with here also. The diplococci are present.

The Kidneys. In all cases the epithelium of the tubules has suffered degenerative changes; it is swollen, granular, and often fatty. The glomeruli show a more important change, although not in every case. The glomerular capillaries are seen to be highly refractive, and the lumen of the capillaries is apparently filled by a hyaline substance, which stains in a manner indicative of fibrin. If now an attempt be made to inject these glomeruli they will be found to be entirely impermeable; and it is probable that hyaline thrombi, composed of fibrin or an allied substance, occupy the lumen of the capillaries. The peculiar organisms are found in the tissues.

It will be observed that well-marked lesions are found in various organs in the body in consequence of the inoculation of rabbits with the diplococcus pneumatic. These lesions are so general, even in those cases in which the organisms do not invade the blood, that it is pertinent to inquire what it is that causes the alterations in the tissues? This question has a most important bearing not only on the experimental disease, but even more on the natural disease, for in man it is only exceptionally that the organisms invade the blood, and yet, as we shall see, distant organs are affected. A particular case given by Professor Welch will be described as bearing on this point.

A rabbit was inoculated subcutaneously with the blood of another rabbit dead of the septi-cenic form of the disease, the blood having been demonstrated to contain numerous diplococci. A local reaction only ensued, and this of slight amount. The animal apparently recovered; but sixteen days after the inoculation it unexpectedly died. At the autopsy it was found that the local wound had quite healed; there was a mere point containing inspissated pus to indicate the seat of inoculation. No diplococci were present either in the seat of inoculation or in the blood and organs, and yet the most extensive lesions were present in the liver, heart muscle, lymph glands, and elsewhere. The necrotic foci described above were most marked in the liver in this case, and the heart showed, besides the lesions found in other cases, an actual necrosis of considerable extent of the muscle fibers. This is an undoubted instance of death, not from the presence of the organisms, but from intoxication with the poisonous principle secreted by the diplococcus pneumoniae.

This poisonous principle can be separated in an impure state it is true; but still, in an active state, from the blood and organs of animals dead of the diplococcus infection, and from the culture fluids in which the organisms have grown, and upon introduction into rabbits, it is capable of killing them by intoxication. Hence we have no hesitation in ascribing the above case to a death from intoxication; and not from infection; and the lesions obtained in it are of the utmost importance.

When we compare the lesions of the tissues in human beings dead of croupous pneumonia with the changes in the bodies of animals dead of the experimental disease, we find not only that the complications, such as pleuritis, peritonitis, pericarditis, endocarditis, and meningitis occur, but degenerations in the muscle of the heart, degenerations and necrosis in the liver, in the spleen swelling, congestion, hyperplasia of lymphatic tissue, and necrosis of cells as well. And in the kidneys the degenerations in the epithelium are present, as in the kidneys of rabbits, and in addition the hyaline thrombi in the glomerular capillaries have been found.

Now that we are aware of the fact that the presence of the peculiar organisms is not essential to the production of the tissue changes in the experimental form of the disease, we are prepared to explain the lesions in other organs of human beings in croupous pneumonia where the bacteria are limited to the affected lung. We know now that the development of croupous pneumonia is associated with the entrance and multiplication of the diplococcus pneumoniae in the lungs; and the absorption of the poisonous products of these organisms by the circulating blood is believed to be the cause of
the changes in distant organs. If we were to inquire now what it is that is most to be feared in combating this disease, the mechanical impediment opposed to the heart, or the withdrawal of a certain lung territory from the performance of its physiological functions? the answer must be that neither of these factors is in itself, nor are both combined, sufficient to account for the gravity that so often is a prominent feature of the disease. Rather, we must consider the effect which the study of the pathological histology of this affection has shown us is due directly to the poisonous influence of the pneumotoxicin on the parenchymatous structures of the body. And if one more fact stands out with remarkable clearness in the interpretation of the work which has been done on this disease, it is that the local inflammatory process in the lungs is conservative and benignant, not to be combated, but rather to be encouraged; for it is to be borne in mind that it is the local process which prevents the invasion of the blood by this destructive organism, and when the invasion occurs we meet with those helpless cases in human beings, the asthenic types of the disease, and the rapidly fatal septicemia in the experimental form of the disease.

There is another aspect of this subject which, while it possesses the greatest interest, and is probably the most significant fact that has come out of the modern study of this disease, can only be alluded to in this paper. This concerns the conferring of immunity and the healing of the disease.

We have seen that rabbits are very susceptible to infection with the diplococcus pneumonic. Yet if they be inoculated with minute quantities of virulent cultures, or larger quantities of weaker cultures, or with large quantities of filtered bouillon cultures, or, finally, by the injection of the glycerine extract of the cultures, and they withstand the inoculation, they will be found to have acquired such a degree of immunity that they may be inoculated with the most virulent cultures without effect. This immunity is not pronounced, and it rarely lasts longer than six months; yet during this period it is transmitted to the offspring. Of transcending interest are the experiments on the cure of the experimental disease. It was found (Klemperer Brothers) that the serum and fluids of the body of an animal which had been rendered immune had the property not only of producing immunity when introduced into the circulation of another susceptible animal, but actually of curing the disease after infection had been in progress some time. They believe that the pneumococcus produces a poisonous albumen (pneumotoxicin), which when introduced into the circulation of an animal causes elevation of temperature, and the subsequent production in the body of a substance (anti-pneumotoxicin) which possesses the power of neutralizing the poisonous albumen which is formed by the bacteria. In man they hold that during the pneumatic process there is a constant absorption into the circulation of this poisonous albumen produced by the bacteria in the lungs. This continues until eventually the same antidotal substance is produced in the circulation that has been seen to occur experimentally. It is then that the crisis occurs. The bacteria are neither destroyed, nor is their power to produce poisonous albumen lessened; but the third factor, the antitoxic element, now exists and neutralizes the toxic substances as they are produced. They demonstrated that the serum of the blood of patients after the crisis of pneumonia contained the antitoxic substance, and was capable, in a fair number of cases, of curing the disease when injected into infected animals. They have made preliminary observations upon patients with a view of inducing the crisis by the injection of the blood serum of persons convalescent from pneumonic, and which consequently contains the antitoxic body. In six pneumatic patients the results were promising. In all there was a decided fall of temperature in from six to twelve hours after subcutaneous injection of from four to six cubic centimeters of the serum. The pulse and respirations were also diminished in frequency. In two cases the temperature fell to 37° C. Twice it fell and remained at normal. In only two cases it fell only temporarily. In ten typhoid cases the injections were negative. The serum has no effect when injected into healthy individuals.

Baltimore, Md.
RECENT IMPROVEMENTS IN CATARACT EXTRACTION.

BY ALLEN H. KELCH, M. D.

The subject of cataract extraction is one of great interest. Any thing that tends to further perfect the operation merits the attention of all who feel an interest in the comfort of the aged and infirm who are usually the sufferers from the presence of cataract.

The day of perfection in the accomplishment of many surgical procedures is rapidly approaching, and this especially pertains to cataract extraction. When smoothly and correctly done it is beyond doubt the ideal surgical procedure, for without chloroform it is painless, and yet the eyeball is cut open; it is bloodless; it is without mutilation; it demands a precision of execution that exists nowhere else in the domain of surgery. It is momentous, for upon its successful execution depends the restoration of one of our most important senses, and under this weight of responsibility the least falter on the part of the operator, or the least quiver of his hand, or the loss of control of his patient for an instant at critical periods in the operation, is liable to ruin it all. It is an operation easy to do—wrong; difficult in the extreme to do successfully, case after case; and finally the result may be bad, after the smoothest and most perfect operation, without scrupulous attention has been given to every detail in the method pursued from the very beginning of the preparation of the patient to the removal of the dressings when healing has been fully accomplished.

It is therefore not difficult to understand the necessity for emphasis upon certain points connected with the operation. These may be better comprehended, perhaps, by numerically stating them thus:

1. Preparation of the subject.  
2. The instruments necessary.  
3. The method of operation.  

Whatever may be said of the necessity for cleanliness in the preparation of subjects for other surgical operations applies with equal force here. It is not necessary to enter into details beyond the simple statement that the patient should be as clean as soap and water can make him. The patient, if a male, should be cleanly shaved. The bowels should be in proper condition, and any manifestations of malarial infection should have received appropriate attention. Two or three hours before the time chosen for operation, which should preferably be in the middle or late afternoon, a mydriatic should be instilled into both eyes, in order that the pupils may be widely dilated, especially if the operation is to be done without iridectomy, and it were better even if that obsolete step is to be practiced. Attention to these details having been given, and the patient being upon the table, it is well to make assurance doubly sure by sponging the lids, lashes, brows, and forehead with a disinfecting solution, such as—

Hydarg. bichloridi..........................gr. j;  
Sodii chloridi ......................-1/2j;  
Aqua destil..........................3j.

Following this a drop of a four-per-cent solution of cocaine instilled into the eye once, twice, or thrice secures complete corneal anesthesia.

2. The instruments necessary. They are three in number, viz., a speculum, a section knife, and a David's spoon. They should be aseptic and in proper condition.

3. Method of operation. The patient at full length upon the back, with the hands beneath the body, the speculum is inserted and the extraction is ready to begin. The upward section, unless there be special conditions calling for a different course, possesses the advantage of position for the operator, and, when all is over, of a natural dressing affording a support and protection to the wound in the process of healing that is superior to any that artifice can devise. The upper lid is referred to. The point of the knife placed upon the corneo-scleral junction, slightly above the horizontal meridian, is made to pierce that structure almost perpendicularly to its surface. Immediately the aqueous chamber is reached by its point, the direction of puncture is changed so as to allow the point to glide over the iris to the edge of the pupil; this once cleared, the point is made to engage the capsule of the lens by elevation of the handle—not depression of the point—and
the knife passed on to the opposite edge of the pupil where the point is elevated to glide over the iris to the counter-puncture. The index finger now placed over the point of counter-puncture will enable the operator to accomplish that step without dragging upon the eye, and without any sudden emergence simulating a slip, which would be certain to make the patient wince and perhaps forcibly close the lids. This accomplished, the section should be completed with such ease and deliberation that it is impossible for the patient to detect by his sensations that the knife has passed from the eye. The pupil at this stage, no matter how widely dilated by the mydriatic in the beginning, will likely be found contracted to almost if not quite its normal dimensions. A point is reached in the operation where we are confronted by a question which affords material for differences of opinion: Shall we do an iridectomy?

Fully comprehending the usual size of a cataractous lens, at first glance it would seem impossible for it to pass through the pupil, and the demand for an iridectomy imperative. Muscular structures, however, are very elastic and capable of a great deal of expansion. A Daviel's spoon placed upon the lower edge of the cornea, making slight but continuous pressure, will at this moment tilt the upper edge of the lens toward the corneal wound, and the pupil will be seen to expand, slowly dilating, until it accommodates itself to the body which has now begun to pass through it, or it may even press the iris out through the wound. Once fairly engaged, however, the natural resilience of the globe will favor its passage, and coincident with the operation of this force all pressure by the spoon may be removed. Contrary to expectations, no forcible nor sudden ejection of the lens is likely to occur, but a smoothness and an elegance attends its exit that is as gratifying to the operator as it is painless to the patient. Any remains of cortical substance may be expelled by gently stroking the cornea in a direction toward the wound with the back of the spoon; the iris, if prolapsed, may be replaced with the same instrument. A drop of a solution of sulphate of eserine (gr. j-3 j) instilled into the eye will produce permanent contraction of the pupil until healing of the wound has so far advanced as to prevent the possible prolapse of the iris and its incarceration.

Inspection having shown the edges of the wound in close apposition, or the stroking with the spoon continued until they are so, the speculum must be so carefully removed as not to disturb that condition, or, if disturbed, the edges again apposed after its removal by grasping the lashes of and lifting the upper lid while the patient looks strongly downward, the operator renewing the stroking until the edges of the wound are properly adjusted; then the upper lid is lifted away and placed down upon the ball in such a way as to prevent the tarsal cartilage from disturbing the wound in its downward sweep to close the eye.

4. A light dressing of absorbent cotton placed upon both eyes, and held in position by strips of adhesive plaster extending from the forehead to the cheek, constitutes the dressing, and the operation is complete to await the process of healing. In a week that will have occurred, and the dressings may be removed and smoked glasses substituted.

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Throughout the steps of section of the cornea and extraction of the lens the operator will have realized the importance of individual skill and a steady hand. He will feel that surgery is a science which, when reduced to practice, becomes an art that is capable of refinement according to the genius of the operator, and he will at the same time, if he be alive to the situation, fully comprehend the two dangers that constantly menace the usefulness of an eye subjected to extraction of the lens. They are (1) infection of the wound, and (2) loss of vitreous humor.

These constitute the scylla and the charybdis of cataract extraction. It is better to be sure they have been avoided than it is to be sorry they occurred. The first is to be avoided by strict attention to the details of preparation of the subject, and to the use of as few instruments in the operation as is consistent with success.

The danger of the occurrence of the second depends largely upon the skill of the operator
and his ability to control the actions of his patient.

It will be observed that until this moment fixation forceps have not been mentioned. Their use is objectionable for various reasons. They are unnecessary, which is perhaps sufficient argument against their use. A skillful operator, once his knife has entered the eye, can control every movement of the globe by it alone; they produce an additional wound and double the chances of septic infection; they add a second source of irritation by their wound to the one made necessary by the section; they must often be intrusted to an assistant in whose hands they may make injurious—even fatal—pressure at a critical period in the operation.

A capsulatome is not necessary. A skillful operator has no difficulty in incising the capsules with the point of the section knife, and its introduction into the eye adds another possible source of infection.

Iridectomy is unnecessary and therefore unjustifiable; it is, in ordinary cases of extraction, the mutilation of an organ whose intact existence offers no barrier to the perfect performance of the operation, and whose function in its entirety is a source of comfort to the individual. These assertions of course do not apply to complicated cases, to traumatic cataract and the like, where extensive injury may have occurred to other structures than the lens.

Case 1. Barney C., aged sixty-nine; totally blind seven months, blind in left eye seven years. Operation on left eye April 2, 1891; upon right eye May 15, 1891. Vision (this month, May, 1892) = 20/20 in both eyes. The pupils are circular, responding to all light-changes, and the function of the iris is fully preserved in each eye.

Barney C. illustrates other successful surgical manipulations. He bears a deep depression above the right temple 2 by 3 inches, which he says was caused by the removal of bone by Dr. D. W. Yandell the day of the Bloody Monday riots. He has now a slight degree of paresis of the left arm.

Case 2. Harriet S., aged seventy-six; blind in both eyes four years. Cataract removed from the right eye March 3, 1891, and from the left June 22, 1891. At present vision = 20/20 in each eye; pupils both circular and function of the irides perfect.

Case 3. Michael M., aged sixty-four; blind in both eyes four years. Cataract extracted from left eye June 28, 1891; from right, January 10, 1892. Vision = 20/20; pupils both circular and function of irides perfect.

Case 4. Charlotte C., aged eighty-two; blind in both eyes four years. Operation on left eye December 14, 1891. On the sixth day after operation this woman was punched in the eye. Immediate removal of the dressings showed the iris prolapsed into the wound. Despite the instillation of eserine it became incarcerated and strangulated. Of course a coloboma is the result. Operation on right eye January 30, 1892. At this date vision = 20/20 in both eyes, one pupil circular and iris active. This case will be interesting to observe in future.

Case 5. Minerva C., aged eighty-six; blind six years in both eyes. Operation on right eye March 10, 1891; left eye May 7, 1891. With the completion of the section of the second eye this patient forcibly closed the lids, ejecting the opaque lens entirely upon the cheek and causing the loss of a small quantity of vitreous. It seemed at that time the eye was ruined. It was, however, very carefully dressed, and in a week inspection showed a strangulated iris projecting through the wound. The eye was treated as any other case of that kind would be, and gradually healed. There is now vision = 20/20 in the right eye, with circular active pupil, and vision = 20/20 in the left, with coloboma corresponding to the incarceration.

Case 6. Lizzie McC., aged sixty-two; blind in both eyes seven years. Operation on right eye April 10, 1892. At this date vision = 20/20, pupil circular and active. The operation on the other eye will be done in the course of the present month.

Many other cases of single extraction I might refer to, but these are sufficient to show that the operation may be done successfully, case after case, without iridectomy. Greater skill may be necessary on the part of the operator, but the lack of skill offers no justification for unnecessary mutilation of important organs in any portion of the human body.

Louisville.
SOME SEQUELÆ OF INFLUENZA.*

BY J. W. IRWIN, M. D.

The visitations of influenza which occurred in our city in the winters of 1889, 1890, and 1891 have induced me to report somewhat in detail some of the sequelæ of this disease which have come to my notice.

CASE 1. Male, sixty-five years of age, has had two attacks of influenza; the first in 1890, and the second in 1891. The first attack was very severe, lasting nearly three months, during which time his mind was much disturbed by hallucinations and fears that he was in a strange city and could not get to his home and friends. This attack gradually passed off, and the mind became for the most part clear, leaving the patient with some dull pain in the occipital region. He also complained of weakness, and at times felt very despondent. His vision was much impaired; one pupil was dilated, the other contracted. Both pupils contracted to light.

Fearing that some spinal disorder might be present, evidences of disease in this direction were sought for. The patient could walk with his eyes closed as well as with them open, and there was no loss of the patella-tendon reflex.

The second attack of influenza occurred in December, 1891, and was not very severe. The acute symptoms lasted a few days only, but much feebleness and depression remained. Six weeks from the date of attack marked evidence of spinal disorder became apparent. There was almost complete loss of power in both legs, and the sphincters of the bladder and bowels had become enfeebled. Patella-tendon reflex is not yet absent, but very much lessened. The patient can not walk with his eyes closed; he suffers from local spots of hyperesthesia and anesthesia, and has a feeling of constriction around the abdomen. He has pains in the thighs and legs, occurring in paroxysms, which at times are very severe. The Argyle-Robinson pupil is not yet present, but other evidences of posterior spinal sclerosis are becoming much more manifest.

The history of this patient reveals nothing to point to any other exciting cause of his malady than the two attacks of influenza. His ancestors were all healthy people, and lived to old age.

CASE 2. Mr. W. B., thirty-eight years of age. The patient had an attack of influenza, which occurred in November, 1891. In all his life before this time he had not been sufficiently ill to require the visit of any physician. When I saw him his temperature was high; he was delirious, restless, and talked incoherently. The acute symptoms lasted four or five days, and then subsided, the mind becoming perfectly clear. A troublesome and painful catarrhal affection in the frontal sinuses, nose, throat, and bronchial tubes supervened, which kept him confined to the house for five or six weeks, during which time he complained of much feebleness and became very despondent. As soon as he was able to travel I advised a change of climate for him. He remained away from home, in a healthful part of the country, three weeks, and on his return the catarrhal trouble had about ceased. He still complained of attacks of dull headache and vertigo. His vision had become greatly impaired. Pupils were dilated, but responded to light. Patella-tendon reflex, on examination, was found to be greatly diminished, and he complained of lightning pains in the thighs and calves. He could not raise his feet from the ground, when his eyes were closed, without falling. He complained of spots of hyperesthesia on various parts of the body, but no anesthesia. The headache still continues, and all the evidences of locomotor ataxia have become apparent. Patient's history is good. He has not had syphilis, neither has he indulged in excesses of any kind.

CASE 3. Mrs. Z. T. came under my observation in March, 1890. She had had an attack of influenza during the winter of 1889, since which time she has not been well. Her history is as follows: Father, mother, two brothers, and a sister died of consumption. She has one sister living who is in good health at the age of thirty-four years. The patient, when taken with influenza, so far as she knew, was in perfect health. I found on examination that the apex of the left lung was consolidated. She

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* Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Association.
had a dry, hacking cough, with very little expectoration, some hectic fever, and loss of strength. She was nervous and felt greatly depressed. Her troubles have increased steadily since I first saw her.

Case 4. Miss Maggie N., aged seventeen. This patient I saw in the early part of December, 1891, at which time she was suffering from a severe attack of influenza. The attack lasted a few days only, leaving her very much weakened and depressed. Shortly afterward she came to my notice again, complaining of a dry, hacking cough, loss of appetite, night fevers, followed by perspiration.

The family history showed that an aunt on the maternal side died of consumption. She has two brothers and three sisters living and in good health. The cough has grown steadily worse and expectoration has become much more abundant; two or three slight pulmonary hemorrhages have occurred. She is afflicted with night-sweats, and has become much emaciated. All the evidences of advanced phthisis are now present.

Four more cases of consumption have come under my care, the exciting causes of which can be attributed to influenza only.

A noteworthy fact in all these cases of consumption is that in every instance an hereditary tendency to the disease has been apparent.

A bright, red-colored skin eruption, which was followed by desquamation, was observed in one eighth of all the cases which came to my notice.

A case of hypertrophy of the liver and one of the spleen following influenza have also been observed by me.

Two cases of melancholia due to influenza, which do not show much signs of improvement, are still under treatment. Kidney involvement, showing albumen, hyaline casts, and blood in the urine, with suppression, has occurred in five instances. This complication made its appearance in all cases before the end of the second week from the beginning of the attack of influenza. These cases have all gotten well under such treatment as would be given in a similar condition of kidney involvement following scarlet fever. Two well-marked cases of hay-fever have followed influenza, and each of the patients has had two attacks, coming the latter part of August and lasting two and four weeks respectively.

One feature of the visitation of this disease in 1891 was much more marked than in the year 1889, which was nervous depression. In such cases I find the foregoing complications to have occurred most frequently.

The first appearance of influenza in 1889 was attended by more pain, fever, and delirium; the disease usually ran a rapid course, and recoveries were more complete than from attacks occurring during 1891. In the latter period the disease was much less painful, but the nervous system was more involved, and recoveries much more protracted.

The cause of this treacherous malady is now regarded by mycologists as bacteria, and the finding of the germ has proven the correctness of this statement.

In viewing the disease clinically some curious facts have presented themselves as to its behavior. Unlike most other infectious diseases, it has appeared in localities far remote from each other on the same date, which goes to show that its spread is not dependent upon one center of infection. For example, when the disease appeared in 1889, it was observed simultaneously in New York, Cincinnati, Louisville, and St. Louis. This would tend to prove that direct communication, either from person to person or through the medium of the atmosphere, is not an essential factor in spreading the disease. It is equally hard to explain the meteorological condition which favors its development and transmission. Regarding the higher atmosphere theory, Tyndall, in his work entitled "Floating Matter of the Air," found that the atmosphere on the tops of the highest mountains in Switzerland was entirely free from every kind of germ; yet when the germs are carried there from the lowlands they live and multiply. Again, the complexity of wind-currents—horizontal, oblique, and perpendicular—observed in the upper atmosphere by the celebrated English aeronaut, Mr. J. Glaisher, would render the explanation of the spreading of the germs of disease through this medium very unsatisfactory. What, then, causes the spreading of the disease?
Finally, the following conclusions, derived from observation, may be permitted:

1. The resemblance of influenza to nearly all other infectious diseases, in the rapid decline of the vital powers through its primary effect on the nervous centers.

2. Its close resemblance to scarlet fever in many instances, chiefly by the skin eruption, which is followed by desquamation and the acute kidney disorders.

3. The blood changes, which affect the nutrition of tissues and organs—in some instances leaving permanent injury in those previously healthy, and sometimes, in the weak and nervous, effecting such changes as result in restoration to health.

LOUISVILLE.

Societies.

LOUISVILLE CLINICAL SOCIETY.*

Stated Meeting, June 7, 1892. Dr. P. Guntermann, President, in the chair.

Dr. J. M. Krim: In substantiation of the belief in free drainage, I exhibit a case upon which this was practiced, the patient suffering at the time from purulent pleuritic effusion. I further wish to state that I believe this is the only reliable mode of treatment in all such cases. This girl (exhibiting the patient) when seven years of age had an attack of typhoid pneumonia, and about four or five weeks after she was convalescent from that trouble the left side of the chest began to bulge and swell, with difficult respiration, which continued until it made a considerable bulge right where you see the scar. It was then opened and a small drainage-tube inserted, which was allowed to remain for about six months. She had some fever and rigors occasionally, but not to any amount. The patient is now in good health, except that there is a little dullness on percussion over that side. She is now about fourteen years of age, and the menstrual function has been established.

Case 2. This is also a case wherein the patient passed through a pleuro-pneumonia of about five weeks duration. About four weeks after he was taken with pneumonia; there was considerable bulging of the right side, with difficulty in respiration, temperature varying between 100° and 103° F., and more or less cough. After the respiration began to be more impeded, I used the aspirator and drew off about a pint and a half of dark-greenish purulent substance, which gave him considerable relief. In about two weeks it had again filled up, and another aspiration was done, a half pint of liquid being drawn off. In about three weeks it commenced filling again, cough became more severe, and one day, in stooping down, the abscess broke into the bronchia, and he expectorated a great quantity of pus.* I intended to put in a drainage-tube on November 10th, the abscess having burst on the 9th. Patient has improved ever since. It was about nine weeks after the first aspiration before the abscess burst.

Case 3. The patient (not present) is a young lady, aged twenty-two years, whom I saw about the middle of October last, suffering with an acute attack of rheumatism. All the large joints were involved, and she had been sick about two weeks before I saw her. I made a thorough examination. Found she suffered with mitral regurgitation in addition to the rheumatic trouble, and she told me she had suffered with heart trouble since the first attack of rheumatism, about ten years ago, which has recurred every two years since. Two weeks after she came under my treatment I found there was considerable hydro-thorax of the left side, with impaired respiration. I thought it was possibly due to the heart trouble. I put her under treatment with salicylate of soda, with the hope that it would remedy it, but the side continued to enlarge. I used the aspirator and drew off about a pint of fluid; it was not a purulent matter, however, just a plain pleuritic effusion. She recovered from this, and about six weeks afterward the right side began to get large. Dr. William Bailey, in consultation, thought the enlargement due to effusion. We used the aspirator and drew off about a pint and a half of purulent substance; it filled up again in about three weeks, and then I used a larger trocar, inserting a drainage-tube through the canula after withdrawing the trocar. The
tube remained in about two months, draining off every thing, and the patient fully recovered. I can not understand why there should have been simply pleuritic effusion of the left side and purulent on the other side.

Case 4. This is a case of tubercular origin. I saw the patient for the first time in March, 1890; there was consolidation of the right lung, temperature varying between 101° and 103.5°. About three months later he had a slight hemorrhage, from which he made a fairly good recovery. In May, 1890, there was considerable edema on the right side; he was aspirated, and about a pint of dark-greenish purulent substance drawn off. In about three weeks we had to aspirate a second time. On the 3d of July last year we made a resection, taking out about an inch of rib, removing about a half gallon of the purulent material, and the discharge has continued ever since. He is now gaining in flesh and is looking better than he has for quite a while. There is not much tube inserted now (about half or three quarters of an inch); the opening is gradually closing up; he has no hectic. I had the discharge examined microscopically and chemically, and the results showed that it was tubercular trouble. The patient is now twenty-six years of age; two sisters have died with tubercular trouble; both father and mother are healthy. You will notice in walking he has a peculiar gait, slightly favoring the right side.

Case 5. The patient had diabetes, and had been suffering about six months before I was called. An examination of the urine revealed about ten per cent of sugar. The amount of urine was six to ten pints in twenty-four hours. His right side was considerably edematous, breathing difficult, hectic, etc. I aspirated him and drew off about two pints of fetid, dark, bloody-looking liquid, and the cavity filled up again in about two weeks. I then used a trocar, inserting a small drainage-tube, which gave him considerable relief; but unfortunately the man died in the course of about ten days after drainage was put in, I suppose, from gangrene of the lung. I would heartily second those who advocate free drainage in the treatment of pleuritic effusion, etc. After the diagnosis has been made I certainly would not attempt a second aspiration, but would use free drainage. The operation might be modified sometimes; instead of resection we may introduce a trocar and rubber tubing through the canula.

DISCUSSION.

Dr. T. Satterwhite: I would like to ask Dr. Krim what kind of tube he used in the first case he presented?

Dr. J. M. Krim: I used a plain rubber tube. It was open about six months, and discharged, I suppose, about ten ounces when opened.

Dr. J. A. Ouchterlony, referring to the case of tubercular trouble exhibited by Dr. Krim: I would like to inquire if there were any tubercular bacilli in the sputa before the operation?

Answer: Yes; the discharge, however, did not have any fetid odor until the last two months.

Dr. Ouchterlony: What is the patient's temperature at the present time?

Answer: Temperature is about 99°, sometimes a little more, then again normal.

Dr. Ouchterlony: Have the bacilli disappeared from the discharge?

Answer: No.

Dr. Satterwhite: Has the patient any cough at this time?

Answer: He has some cough, principally in the morning, and some little expectoration. The discharge is very slight during the day, increasing at night when the patient lies down.

Dr. Ouchterlony: I regret very much that I did not hear the report of the other cases, but the one I was fortunate enough to see is certainly interesting, and it suggested to my mind some points concerning the combination of pleurisy with pulmonary tuberculosis. We are aware that pleurisy in connection with tuberculosis is quite common, and I would mention in passing that when it does occur it is generally of a suppurative variety. Under such circumstances not only is it good practice to do as Dr. Krim suggests, to open the pleural cavity and establish drainage, but it seems to me that it affords most excellent opportunity for bringing the anti-tuberculosis treatment to bear in a manner that can not ordinarily be done, attacking the disease by means of copious washing out with carbolic solutions. I think we should
continue to wash out the cavity under such circumstances with carbolized solutions of the proper strength, as long as any remains of the cavity exist. That they are tubercular processes going on in the pleuritic cavity as well as in the lung itself is proven by the fact that tubercular bacilli were found.

As to removing a portion of rib in tubercular pleurisy, I do not know that it is entirely free from objections, because it may lay the patient liable to danger of infection of the ribs with the bacilli. My preference in the majority of cases of suppurative pleurisy that I have seen has been in favor of using a large rubber tube. Indeed, I have not had a case in my practice within the last ten or twelve years where it has been necessary to resort to the exsection of a rib. I devised a self-retaining rubber tube, much larger than the largest trocar, by means of which the opening can be kept as fully pervious as desired, and by which is afforded a most excellent opportunity for washing out the pleural cavity. The ordinary soft catheter used I do not think is sufficient, as a rule, and it has the disadvantage that there is always a possibility that the catheter may slip into the pleural cavity. Such accidents have occurred in a number of cases, and have necessitated the performance of an operation of some magnitude in order to correct them. The tube I devised has a flange which prevents it from entering the cavity.

Dr. J. W. Irwin: The remarks made by Dr. Ouchterlony seem to be about all that can be said upon the subject. With reference to the operation for removal of pus from the pleural cavity: Several years ago I had made by Mr. Armstrong an instrument for entering the intercostal space, which is quite narrow. It is very hard to get a canula of suitable size between the ribs. I had made a flat canula and trocar, so that I could insert it between the ribs by elevating the elbow as far as it could be elevated, and in that way could get free drainage of the pleural sac very much easier than by the ordinary means of aspiration; and I subsequently, as Dr. Ouchterlony has just said, inserted a rubber drainage-tube, allowing it to stick out far enough so that it could not be drawn into the chest.

Now as to the method of washing out the chest in consumptives: I have had considerable experience in that. One case I will mention briefly: The patient was a large fleshy man (in the employ of a brewer), who had inherited consumption, and during the first year of the disease he developed quite a sac of pus in the pleural cavity, and it became necessary to evacuate it. I evacuated it in the manner described, and injected every other day from a pint to a quart of carbolized solution, two and one half percent of pure carabolic acid, into the cavity of the chest. He improved for a while very rapidly, and it seemed that he would get well, but gangrene set in, and he became rapidly worse and died. In another case that came under my observation I used a three-per-cent solution of tincture of iodine, injecting from a pint to a quart—it took that much to wash out the cavity. The same results followed as in the case mentioned. In both instances the washing seemed to produce a decided improvement for a short time, but subsequent results hastened death.

Dr. Satterwhite, referring again to the first case exhibited by Dr. Krim: I notice that the opening was made rather high, and think it would have been beneficial if an incision had been made lower, so that the syringe might have been used from above downward. However, the results show that the child made an excellent recovery. I remember a number of years ago a child, about nine years of age, had a very excessive effusion, and I made a silver tube with a flange, which was inserted and the cavity washed out regularly for two or three months. The child had the most excessive curvature of the spine that I have ever seen, resulting from collapse of that side, but by practicing inflation of the lung it evidently broke up the adhesions, and the curvature entirely disappeared. The second case reminds me of one that I saw some time ago in connection with one of the members of this Society: There was very considerable fullness of the right side of the chest, the lower half or two thirds. A portion of the rib (probably about two inches) was trephined with the expectation that as soon as we did so pus would gush out, but no pus came. We concluded that we ought to put in a drain-
age-tube, but were at a loss to know exactly what course to pursue. The next morning there was a very free discharge of pus, I suppose about two or three pints. My idea was that there was no effusion, but that it was an abscess of the lung. There was complete dullness; we could hear no respiration at all in the lower part of the chest, and there was also a bulging, so we diagnosticated pleuritic trouble. It came on in the way that these pleuritic effusions usually come.

Dr. W. T. Dulaney, of Bristol, Tenn.: I have had a little experience with this character of cases, not a great deal, but what I had came thick and fast. I had three cases within eighteen months, about the year 1885; one was a very remarkable case, and illustrates the importance of washing and drainage. I will report them briefly. The first subject was a young man, about twenty years of age, very stout and vigorous previous to the attack to which I refer. About the first of January, 1885, he danced all night and soon after took a trip by rail, and was subsequently attacked with what his physician (a very good one) called pleuritic pneumonia. I was not called to see him until May; found him suffering with general anaemia, very much swollen all over; could not lie down; breathing was very rapid; pulse over 140; left side of chest filled with fluid, and he was depending upon one lung alone for respiration. I did not have an aspirator at the time, but relieved his general edema by puncturing his back, legs, etc., and in a day or two it all drained out. He was then in such condition that I could make a more thorough examination. We aspirated him at about the eighth intercostal space behind, and drew off about eight pounds of pus, having a sort of muddy appearance. Of course there was immediate relief from the distressing symptoms; pulse came down to normal in less than twenty-four hours. In two weeks he was as full as ever. We operated again, and drew off this time about nine pounds of pus. The cavity was thoroughly washed out at each aspiration with carbolized water. Two weeks after the second aspiration he was fuller than ever. We used a trocar this time, but just as we were about ready to operate the abscess broke into the lungs, and quite a quantity of very offensive pus came out by way of the bronchial apparatus. Previous to this there had been no odor about the pus whatever. We removed with the trocar about eleven pounds of pus, then inserted a small drainage-tube, washing the cavity each day. In the course of two months, while under treatment, we calculated that we removed from this patient about seventy pounds of pus. He made a good recovery and is now as strong and vigorous as ever, and is doing hard work as a plumber.

A short time afterward I was called to see a case that another doctor had tapped with a trocar. The patient was a little girl, about two years of age, pale, thin, and as poor as anybody could be, financially; I merely mention this to show the surroundings. We used the trocar and drew off quite a quantity of pus, and washed it out thoroughly with carbolized water. The child made a good recovery.

The next case was a boy, about eight years old, who had an abscess very low down—in fact so low that I thought it possibly might be some hepatic trouble. It was on the right side. This child had always been in the habit of having his own way, and would not have it opened for about eight months, but it was discharging a little. The little fellow had become very much reduced, and I did not think he would ever get well. The abscess was opened in front and thorough drainage established; it was washed out with carbolized water every day, and the patient made a good recovery.

I regarded the first case as a very interesting one on account of the quantity of pus removed. The heart was dislocated, as far to the right side before the operation as it should be to the left in the normal state.

Dr. W. O. Roberts: I have had a large experience in the treatment of empyema; have seen only one case of true empyema die after draining was established. That case occurred in the City Hospital, and was doing very well when a case of erysipelas was brought into the hospital, and this patient among others became affected and died. In the majority of my cases the trouble has been on the left side. I have seen two cases in which there was a spontaneous opening, and in each case it occurred high
up in the region of the nipple, and would only drain, of course, when the fluid reached a level with the opening, or the patient would lie down. I operated upon one of these patients a few weeks ago. He was a graduate of the University. In this case the empyema was on the right side. An opening was made in the seventh intercostal space, and he recovered without an untoward symptom.

In regard to the removal of a portion of a rib, my rule has always been, whenever I can insert my little finger between the ribs—that is, when there is sufficient space to admit of the introduction of a large-sized tube—no interference with the ribs is necessary. But where this can not be done, it is then necessary to remove a section of rib. As to the use of the aspirator, I think the cases reported this evening prove the folly of attempting to treat or cure these cases by use of the aspirator. They invariably refill. The aspirator, I think, is only of use as a means of diagnosis. I believe an opening ought to be made just as soon as pus is discovered. Another point of great importance is the washing out of the chest. The weight of authority is against washing out the pleural sac unless there is evidence of fetid discharge. As long as the discharge is sweet, it is not necessary to wash out the chest. There is a great deal of danger in washing the pleural cavity when you distend it to any great degree. A number of cases of sudden death have occurred from overdistension of the pleural sac. A point of considerable importance in the treatment of these cases, after a tube has been introduced, is the use of an abundance of absorbent gauze (not cotton, but gauze), so that every particle of the discharge may be absorbed as soon as it comes to the mouth of the tube. Recovery in many of these cases is delayed by neglect of this provision.

Dr. Ouchterlony: One reason for using the aspirator is to get immediate relief when the patient is suffering with great interference either of respiration or circulation.

Dr. Krim: Concerning resection of the rib, I can not see any thing wrong about this. In all the cases that I have treated, and others that have come under my observation, I have never seen any bad symptoms or results from resection; still I am inclined to do just as Dr. Roberts states; and, as before mentioned by me, if you can introduce in the intercostal space a large-sized trocar, and so establish drainage, it might sometimes be preferable to pleurectomy. But I believe, where there is no chance to get a good-sized trocar in between the intercostal space, that resection is not going to do any harm.

In regard to washing out the cavity: In none of the cases I reported to-night was there any washing out done, except in one or two instances where the discharge had become offensive. As long as there was no fetid discharge the cavity was not washed, and all the patients improved very markedly.

Dr. Ouchterlony: My remarks were especially in reference to the last case exhibited by Dr. Krim, which is a case of tuberculous suppulsive pleurisy. I do not think there can be any doubt that having tuberculous fluid flowing over the porous structure of the rib lays it liable to tuberculous infection.

Dr. Roberts: When it becomes necessary in tubercular trouble to remove a portion of rib, would it not be a good idea to have the ends of the bone cauterized with the hot iron?

Dr. Ouchterlony: There is one objection to the removal of a portion of rib that I have noticed very frequently. It is this: New bone forms with great rapidity, and the tendency to closure of the opening is very great by the formation of bony material. I have had cases under my care where excision of a piece of rib has been made, and where the opening has been reduced to a minimum in a very short time. With me the point has always been whether it was not better to resort to the least severe operation if it will do; of course, if it is not adequate to meet the indications of the case, why then remove a portion of the rib by all means.

Dr. Dulaney: Last fall a young conductor on a freight train in Virginia was shot by a tramp. I saw the patient about six weeks afterward, and found the ball had entered at about the seventh intercostal space in front; there was general dullness all over the left side of the chest; he had no bloody expectoration and no cough, nor had there been any; but
there was a bulging at about the tenth rib behind. After consultation with the attending physician, Dr. Butler, we decided to make an incision there, and when we reached the cavity there was a gush of fetid pus and serum, I suppose about two pints, and upon enlarging the incision we found that the tenth rib had been broken by the ball passing through it about two inches from the spinal column. While examining the wound as the pus and serum came out, the hole suddenly became plugged with a substance which looked like dead cellular tissue or lung. I took hold of it and pulled out quite a quantity of the most offensive material that I have ever seen; it looked to me very much like dead lung tissue. About a double handful of it was removed. We found the ball just outside the rib, deep under the muscles of the back. The patient in the mean time had considerable fever. The wound was thoroughly washed out, and the patient put to bed. In a day or two, in giving him an enema, we were greatly surprised to see the water come out at the opening in the back. I had some doubts about this being the water used in the enema, so we used some colored water, which also came out through the hole. The fever went down and the patient slowly recovered. He had fecal discharges from the opening for two or three months, and especially if they were fluid. The opening finally healed, and the man recovered, though with impaired strength and diminished capacity.

Dr. Roberts: I would like to ask Dr. Dulaney if the material removed was a solid mass.

Dr. Dulaney: It may have been the result of hemorrhage at the time the shot was received. It was a speckled mass, looking like cells of the lung; in fact it looked like dead lung tissue. The hole was plugged up completely, and we kept pulling out piece after piece of the offensive material, and when we found the fistula I did not know what was going to become of it. When the fecal discharges were a little thin or fluid, it would just pour out of the hole. I suppose it was the result of some inflammatory adhesions of the transverse colon to the diaphragm, which sloughed through.

Dr. Irwin: A man, with a hospital shirt on, came into my office one day, out of breath, and asked to be examined. He was forty-four years of age, and evidently had been an Irish laborer. He gave the history of having been at work for the Western Union Telegraph Company raising a telegraph pole, and while doing so a spike that was resting against the pole, with the spike end up, fell on his head, striking on the upper portion of the occipital bone, producing some concussion over that region and considerable swelling, but no fracture. There was no laceration of the scalp, and the injury did not give him much inconvenience, as he continued at work for twelve days. He had some dull pain in his head, and some little pain in his chest about the upper and middle third of the sternum; he also complained of some pain in the region of the heart of a dull, aching character, but not continuous. There was no loss of appetite nor sleep; his digestion was good, and when resting he felt comparatively strong. At the end of twelve days the pain in the head grew worse, and he then applied for admission into the City Hospital. This occurred, I think, as nearly as I can remember, about the 1st of October, and he has remained in the hospital ever since. On walking about, taking any considerable exercise, his face and lips would become of a purplish color, the veins in the face and neck becoming immensely enlarged; in fact jugular veins appeared to be one inch in diameter. There was no pulsation nor murmurs in the veins. The veins over the sternum and over the chest were also greatly enlarged. One vein extending from the right inguinal ring to the axillary and subcapular veins was very much enlarged and tortuous. Some of the veins in the lower extremities were also enlarged, some of them varicosed. When the patient stooped over his face, hands, arms, finger-nails, and palms became purple in color. When standing erect the face became quite blanched, and the veins normal in size. His pulse was strong and full when standing erect, but when stooping forward the pulse grew very feeble on both sides. When in a stooping position or upon any exertion he had considerable dyspnea. He had a hacking cough without expectoration; he complained of some dull headache at times, which was made worse by stooping over. Exertion also caused his head
to ache. I examined the chest by percussion, found increased dullness over the region of the heart, extending pretty near to the ensiform appendix of the sternum. The sound of the mitral valves was short and sharp, and heard a little toward the right of the left nipple. When stooping forward the sounds on both sides became muffled, and a faint blowing sound could be heard on the right side. There was no evidence of aneurism. Pressure over the region of the liver caused enlargement of the supraclavicular veins, and also the vein entering the inguinal ring that I have mentioned. The man is not strong; that is, he is physically strong enough, but on taking any sort of exercise he pants for breath. Food improves his condition very much. In other words, in half an hour after his dinner he seemed much better; he could walk or stoop without causing any dyspnea. I gave him two ounces of whisky, which had the same effect on him as food. It was evident that both the food and whisky increased the power of the heart's action. I will state here that he gave the history of not being an intemperate man—he took a drink occasionally; said he had been a laborer for thirty-six years. He had never done any very hard work, and, to use his own expression, had "never abused himself in any way." He never had venereal disease. I diagnosed dilatation of the right side of the heart with insufficiency of the tricuspid valves. Time will not permit my going into differential details. I wish further to say that I had his urine examined, and found it to contain a small amount of albumen, but no casts. There was slight edema about the eyes and ankles.

Dr. Roberts: I saw a man day before yesterday, a laboring man, thirty years of age. Last August he was loading a wagon with logs; the wagon was at the time about half full. He says that he was about eight or ten feet from the ground; while standing on the wagon, pulling a log up with some kind of rope attachment, the rope broke or gave way, and he fell backward, striking on his shoulders; was insensible for only a few minutes. He said when he came to himself he found that he had lost all muscular power of the body from his neck down. He was seen some little time afterward by a physician, and upon examination it was found that he had not only lost all power of motion, but also of sensation, from his neck down, with the exception of his shoulders and arms. He has remained in about the same condition up to the present time. He can raise his arms up, bend his elbows, but can not bend his fingers. He has sensation in his arms, also upon his body on a level with the lower boundary of the axillary space; below this point there is no sensation and no motion. There has not been at any time any ecchymosis or local evidence of contusion or mark to show where he struck the ground. Urine runs from him as fast as secreted; he has no control over bowels; when he has diarrhea the feces trickle from him all the time, and when his bowels are constipated the nurse has to take the fecal matter away with the fingers. His intellect is as good as it ever was.

Upon examination I could find no deformity whatever about the spine; between the seventh cervical and the first dorsal he is sensitive to the touch, but not nearly so much as he was shortly after receipt of the injury. He has four large bed-sores; his legs at first were perfectly straight and helpless, but for three or four months the muscles have been contracting, until now there is marked flexion at the knee and at the hip, and it is impossible to straighten his legs. Before this occurred he says that there was considerable edema in both legs; there is no evidence of that now, in fact his legs are very much shrunken. It is a question in my mind as to the nature of the injury, and as to the advisability of an exploratory operation to see whether or not there is any fracture of the lamina, and if such can be found, whether its removal or elevation, if depressed, would be of any benefit to him. There has been no priapism.

L. S. McMuntry, M. D.,
Secretary.

Charity.—A physician in this vicinity, says the Boston Medical Journal, recently visited a family which he found so very destitute that he gave them five dollars in addition to his prescription. He learned later that three dollars of his bounty was given to the priest, and the rest was used to employ another doctor.
LOUISVILLE SURGICAL SOCIETY.*

Stated Meeting, June 13, 1892. E. R. Palmer, M. D.,
President, in the chair.

Dr. W. L. Rodman: I want to exhibit a wedge-shaped section of bone removed from a patient, shown at meeting of the Surgical Society several months ago, suffering from ankylosis of the knee-joint. I intended to have performed the operation known as the Rhea-Barton operation, removing a V-shaped piece from the bottom of the femur, but after cutting down to the joint I decided it would be best to remove the patella in connection with a V-shaped portion of the femur. The patient has done well since the operation; there seems to be firm union, and I expect to send him out from the hospital very soon. Instead of going partially through the femur, as Barton did, I sawed all the way through.

Dr. D. W. Yandell: The dressings up to the present time have not been removed, but the case gives every promise of being an entire success, certainly as far as any deformity is concerned. What the ultimate use of the leg will be, of course we cannot tell.

Dr. W. C. Dugan: I think it is a good idea in these cases to remove a piece the entire thickness of the femur.

Dr. D. W. Yandell: I will report a case of considerable interest, on account of several peculiar features. A lady about five years ago first noticed an abdominal tumor of considerable size, and then per vaginam it discharged, passing off in two or three days, the discharge being a thickish, tenacious fluid; the tumor after a time filling up again. This is about the history. The lady consulted none other than the eminent Dr. Dash. She went to him as many as three different times, but he declined to operate, never giving the woman any satisfactory reason, except that she would live longer without it. The tumor continued to fill and discharge by the vagina about every four months, each time attended with great pain, and each time after discharging the tumor would almost entirely disappear, leaving only a slight enlargement. The patient grew tired of this, and consulted Dr. Dash, a very superior physician, who also declined to operate. She then came here (through the influence of a student, I think a brother of hers), and was seen by a number of our prominent physicians, among them Drs. Anderson, Roberts, Rodman, and myself, and we diagnosed cystic ovarian tumor. She was suffering from peritonitis at the time examination was made; abdomen was so tender that she could hardly bear the weight of the hand upon it; diagnosis, therefore, was very difficult, but we finally decided it was cystic tumor, and that I would operate a little later, as soon as the tenderness abated, which, however, never disappeared entirely. Her pulse was very frequent, but there was little rise in temperature, it never going above 101.5°. This is a point I want to emphasize; it is corroborative of what we have all seen—extensive general peritonitis, with little rise in temperature. She would gain for a certain number of days, then lose. When she was a little improved she made up her mind that she could not live much longer, and would have an operation performed. A strange part of it, to me, is this: That a tumor weighing when removed probably thirty or forty pounds, containing many cysts, decidedly multilocular, three or four quite large cysts which would have held a gallon, perhaps two, and any number of smaller ones, from the size of a pea up to the size of your fist, containing the usual albuminous-looking material, one or two containing darkish fluid, but the most of them having that opaque appearance that is seen so often in these cysts, and without a single adhesion. One physician she had consulted before coming here gave as his reason for not operating that the tumor could not be taken out, as it was adherent everywhere. The other never said as much, but he must have thought there were pelvic adhesions, from the number of times it discharged by the vagina, and because he declined operation. When we opened the abdomen there seemed to be no opening from the tumor to the vagina; however, Dr. Rodman and Dr. Roberts said they thought there was one in the tumor communicating with the peritoneal cavity, but in my opinion this was done in lifting the tumor out. If the tumor had opened into the vagina, it seems to me it would.

* Stenographically reported by C. C. Mapes, Louisville, Ky.
have formed adhesions. We operated in the midst of a furious attack of peritonitis, which had doubtless been going on for weeks. The whole peritoneum (I am sure that not a single portion escaped) was absolutely covered with lymph; it was studded with lymph, besides quantities of loose lymph in the cavity of the peritoneum, and yet not an adhesion.

She recovered from the operation and did well for forty-eight hours, without rise in temperature. The cavity was thoroughly washed with warm water. We inserted a drainage-tube, but never drew off more than two or three drams of reddish-colored fluid at any one time. In twenty-four hours the fluid lost its red tinge and was filled with shreds and patches of lymph; then soon it became fresh, with evidences of suppuration. She began to grow worse, and in four days died, the temperature rising to 105°.

I mention the case first, because it is certainly a very unusual one in all its general features. Among the most extraordinary is that the tumor should disappear at intervals of about four months, filling up and again disappearing, how we do not know. At the time we operated there was no opening in the cavity of the pelvis, no opening in the cul-de-sac nor in the tumor; I think there would have been some evidence of it had there been any. The next is the extensive general peritonitis, with little rise of temperature. When we opened the abdomen it was absolutely ablaze with peritonitis. All through the large and small intestines, on the rectum, and everywhere there was not a spot that you could put a pin down that you would not have touched lymph, and yet there was little rise in temperature. The lymph did not seem to be sufficiently plastic to unite any surface, but was plastic enough to stick to the intestines, etc., and could be picked off with the fingers. At the time she was taking about two grains of morphia per day. In the midst of all this she gained five or six pounds, was cheerful, hopeful, and anxious for the operation.

Dr. J. G. Cecil: I have never seen a case presenting the symptoms as detailed by Dr. Yandell. It certainly is a very rare case as far as my reading and observation go. I would not know how to explain the presence of such physical evidences of peritonitis without some systematic signs; some fever or other evidences of it. I do not see what else could have been done under the circumstances, and certainly no such conditions could ever have been anticipated.

Dr. W. L. Rodman: My recollection is that as soon as we cut through the abdominal walls colored fluid came out before the tumor was punctured with the trocar. It was not the clear acetic fluid that is so often found accompanying such tumors. I feel confident that one of the cysts had ruptured spontaneously two or three days before the operation, possibly not over twenty-four hours before, and I think the colored fluid which escaped before the tumor was entered by the trocar must have been due to rupture of a cyst. I am almost positive that the tumor was not ruptured by either Dr. Roberts or myself. Am also confident that there was an opening in the left side of the tumor before we opened the abdominal cavity.

Dr. W. O. Roberts: One very strange feature in this case, if the tumor had ruptured spontaneously, is that there were no adhesions. Both the parietal and visceral layers of the peritoneum were studded with lymph. The abdominal cavity was thoroughly washed out. There was an opening in the tumor and a great deal of fluid in the cavity of the peritoneum; one cyst was ruptured. Temperature of the patient at time of operation between 99° and 100°. I think the peritonitis must have been due to rupture of the cyst.

Dr. W. C. Dugan: The case reported is certainly a very interesting one, and is another proof of the fact that very little reliance can be placed upon the question of temperature in making a diagnosis. There was a time when we would be inclined to preclude the possibility of peritonitis if there was no marked rise in temperature. Now those who do much abdominal work know how common it is to find extensive peritonitis without any considerable variation of temperature. I assisted in an operation yesterday for this trouble, the patient having no rise in temperature whatever. About a week ago I saw a case in Indiana, where there was extensive peritonitis, about a half gallon of
pus, and the patient's temperature was never above 99°. There was a tumor in this case of considerable size. The temperature is not to be relied upon as a symptom in these cases; the pulse is a much more reliable guide for operation. I can not help believing, as Dr. Rodman states, that there was a rupture into the peritoneal cavity in the case reported by Dr. Yandell.

Dr. D. W. Yandell: In three cases upon which I have recently operated I have done so in the midst or just after a rupture, when the whole cavity was filled with a brownish fluid. In the last case there was septic peritonitis and very extensive adhesions, but the patient recovered.

Dr. W. C. Dugan: Referring again to the case reported by Dr. Yandell, I would like to ask the condition of the patient's bowels at the time.

Dr. D. W. Yandell: She had no trouble in this direction; bowels were regular and easily moved, considering that she was taking opium every day.

Dr. W. O. Roberts: About the middle of last month I operated upon a case of Dr. Palmer's, a man about fifty-seven years of age, the history being that he had more or less trouble in emptying his bladder for a year. Three months before the operation he got so that he could not pass water at all, and his bladder had to be catheterized regularly and was occasionally washed out. Dr. Palmer called Dr. Yandell and myself to see the case, and we made a thorough examination for stone, but found none. The urine contained a large amount of pus, and we advised that at that time that an operation be performed, but the patient was not prepared for it and went home. He had his bladder washed out regularly with boric acid, and, I believe, took boric acid internally. He returned about the middle of last month, very much improved as to the condition of his water, but there was no improvement as regards the evacuation of the bladder, and we advised a suprapubic cystotomy; that we were of the opinion he had an enlarged middle lobe or tumor of the bladder that interfered with the discharge of the water. The catheter would seem to meet with obstruction, and it was sometimes quite difficult to introduce it into the bladder. We did the suprapubic cystotomy (Drs. Palmer, Rodman, and several others were present at the operation), and as soon as I introduced my finger into the bladder I discovered a tumor. It was situated posteriorly, but was rather to the left side and dropped over against the neck of the bladder. With a pair of forceps I got hold of it and twisted off a piece, and afterward removed the balance in small pieces. We then inserted a drainage-tube, and the patient got along nicely. On the third day he had a severe spell of vomiting, and the drainage-tube came out. I saw him the next day, and attempted to introduce the tube, but it caused him so much pain that I concluded to leave it out altogether. He passed water through the urethra for forty-eight hours, when it came out very freely again through the suprapubic opening. The bladder after that time was emptied entirely through the suprapubic opening. He got along without an untoward symptom, returning home about ten days ago. This tumor was about the size of the first joint of the finger, and quite broad at the base. It would be an interesting point to find whether or not the removal of this tumor will give the man the relief sought for; that is, whether after closure of the suprapubic opening he will be able to pass his water in the natural way. The rule in these cases is, I think, that where the trouble has lasted as long as this, after the removal of the growth, there is still inability on the part of the patient to entirely empty his bladder through the urethra.

Dr. E. R. Palmer: I would like to mention two points: First, that the patient improved very much in health during the several weeks he was at his home. At first he voided his urine by means of a catheter every half hour; from this he got down to every four or six hours, with urine clear and fresh. The tumor was a beautiful demonstration of the diagnosis; its position and shape both show it to have been the mechanical cause of his trouble. The other point I want to mention, which Dr. Roberts has neglected, is the considerable (so far as the reopening of a portion of the wound is concerned) septic suppuration due to the use of Amende's catgut. It has made me more firmly
of the opinion that boiled silk is much better than catgut for ligature material.

Dr. W. C. Dugan: This is the kind of a case where we need the cystoscope; with its use a diagnosis can be made without any trouble, even locating the tumor as to position, condition, etc. I think the operation of removing the tumor through the perineum preferable to the suprapubic when so clearly pedunculated as it appears this case was, inasmuch as you can secure better drainage.

Dr. W. O. Roberts: This patient was a very fleshy man and had a very deep perineum. I think we would have had more difficulty in removing this growth through the perineum than above the pubes. I further believe that we secured equally as good if not better drainage than if the operation had been performed as suggested by Dr. Dugan. The chances are that this man will be obliged to have a permanent opening there for the purpose of emptying his bladder; that being the case, I think the suprapubic operation the best.

Dr. E. R. Palmer: I exhibit here a specimen removed from a man, about seventy years of age, who had been treated by a member of the medical profession for cancer of the stomach. It is stated that he had in all consulted from fifteen to twenty-five doctors. Dr. H. H. Grant asked me to see the case in consultation, and on examination through the rectum the prostate did not seem to be very much enlarged. We used a catheter, which was readily passed to the interior of the bladder, and but little urine was found. My opinion was that it was a case of old, long-standing Bright's disease, with suppression of the urine, and that the bladder was empty because of disordered kidneys. The patient died without ever secreting more than a few drams of urine. The last twenty-four hours he was in a perfectly comatose condition. We asked for a post-mortem, which was readily consented to. We found the ureters as large as my forefinger, and filled with urine, which was removed carefully and examined, showing the presence of albumen. A section was made of one kidney, and its condition found to be hydronephrosis. Up to a day or two before his death the idea of suppression had not been entertained at all. One kidney had kept him alive, no doubt, for some time, until finally the lateral enlargement toward the right kidney produced a more complete obstruction. There must have been nearly an ounce of urine discharged from the ureter alone. As far as we were able to learn, he had been voiding a fair amount of urine up to within a week of his death. Examination per rectum showed the prostate rather under size of what you would expect to find in a man of that age, with the urethral tract through the prostate discernible by touch, showing that the enlargement was symmetrical in the lateral lobes. We looked upon this specimen as probably a scirrhus of the prostate with a metastasis of the left kidney. No microscopical examination has been made, but we intend to have this done.

Dr. W. C. Dugan: I hardly think this is a case of carcinoma; I believe it is an old man's prostate with retention of urine with secondary involvement of the kidneys and ureters. I have recently made two post-mortems on old men presenting very much the same condition as described. One I remember distinctly had been diagnosed as malignant disease of the prostate.

Dr. W. O. Roberts: I agree with Mr. Dugan that this is probably an old man's prostate. I hardly think it is malignant disease.

Dr. W. L. Rodman: I do not think the prostate indicates any malignant disease. I have never yet seen a case of malignant disease of the prostate, and do not think it is very common; indeed I know it is very rare.

Dr. E. R. Palmer: All I have to say in closing is that the condition of the kidney would indicate to me that it is probably of a malignant nature. One point of interest is that it was clearly one of those cases where any operative procedure would have been futile. The degenerated and worn-out condition of the kidneys would, of course, have made the termination of the case fatal, no matter how successful an operation might have been primarily.

Dr. W. C. Dugan: I have one case which I desire to report, it being the first one of Bassini's radical operation for hernia performed in the city, so far as I know. I report it for several reasons. The patient came into the hospital
several days ago with an old hernia, with a history of twenty-four hours' strangulation. His pulse was rapid, expression bad, and he had been vomiting fecal matter for several hours; tympany very marked. We decided to operate at once, so the patient was prepared, all the aseptic and antisepctic precautions being taken. The incision was made, beginning one inch external to the internal abdominal ring and extending well down over the tumor. When the sac was exposed, constriction cut from without, little or no difficulty was experienced in returning the intestines. Here we found that we were dealing with an old congenital hernia, a complication any thing but a pleasant surprise. The lower part of the sac was closed around the testicle, making as it were an artificial tunica vaginalis. The remaining part of the long peritoneal pouch was cut away up to the internal ring. The neck of the sac was then caught up and the regular draw-string suture applied, which seemed to effectually close the cavity. The remaining part of the operation was exactly as Dr. Milligan described it at our last meeting. The point I wished to mention particularly is the length of time necessary to perform this operation. You will remember Dr. Milligan stated it would take three quarters of an hour. I performed this operation in twenty-five minutes, and I think this is all the time you need for cases of this character. After I had completed the operation, I regretted very much that I had not put the testicle back, placing it just behind the inguinal canal, resting it in the iliac fossa beneath the peritoneum. I know of no authority that would have justified such a procedure, but I think it is the proper operation. Since the beginning of the radical operation for hernia we have experienced great difficulty in closing the ring, because the cord is there, and the question has come up more than once whether it would not be best in these cases to sacrifice the testicle. There is no reason why the testicle could not be put back in the subperitoneal space in the iliac fossa and left there. I do not see why pressure upon the testicle would be the cause of more inconvenience than pressure upon the ovary. It is true an incarcerated testicle—that is, one in the inguinal canal—is prone to undergo malignant changes, but these changes are in my judgment due to trauma and prolonged pressure in so small a space, which conditions would not exist were the testicle placed as mentioned above—in the iliac fossa. I am confident the uncertainty following all the so-called radical operations could be done away with by this simple and safe procedure. By it the radical operation in the male would be as certain as that in the female. I cannot understand why the testicle was placed in the scrotum, where it is exposed to various kinds of trauma, instead of being left as I have suggested. I am not aware of an operator having advised or practiced this method, but I shall not be surprised that in my future reading I will find that it is an old procedure laid aside.

In conclusion, I desire to express my most hearty approval of the operation as advised and practiced by Bassini. It seems to me to be the easiest to perform, and based on correct surgical principles. I predict for it a future.

I may add that the patient operated upon has done well, and there have been no unpleasant symptoms.

Dr. W. O. Roberts: I am a little surprised that Dr. Milligan should state it would require three quarters of an hour to do this operation. While I have never performed it myself, I have seen it done several times. I saw Dr. Weir, in the New York Hospital, who is a very careful but by no means rapid operator, do two of these operations, and I am certain he was not over twenty or twenty-five minutes. It struck me as being the best operation for radical cure of hernia that I had ever seen. I asked Dr. Weir his opinion of the operation, and he said he thought it was the best that had ever been introduced, but it had not been out long enough yet to tell whether or not it was a perfect operation; that is, to tell what the percentage of relapses would be.

JOHN G. CECIL, M. D.,
Secretary.

Dr. Bleyne's treatment of diphtheria consists in the application of ice upon the neck, and the internal use of ice. He claims that cold destroys the bacillus of diphtheria.
Correspondence.

DUBLIN LETTER.

A Case of Complete Rupture of the Vagina; Laparotomy and Amputation of the Uterus.

Mary Redmond, aged thirty-five, was admitted to the Rotunda Hospital, June 27th, at about 4 o'clock A.M., being brought in on a stretcher. This was her eighth pregnancy, the last child, a healthy boy, having been born five years ago. The woman herself was of rather small stature, pale, and somewhat weakly looking; facial expression somewhat unquiet, though not markedly so. She stated that she had carried the child for nine months, and according to her calculation it was now full term. Labor had begun, so she said, on Saturday night, June 25th; continuing through Sunday there was a small but constant dribbling of waters, and on Sunday night, after a few particularly violent pains, there was a complete cessation of the pains. This was at about 2 o'clock Sunday morning. Feeling somewhat faint and anxious, she had herself brought to the hospital, where she arrived an a stretcher, as already stated, at 4 A.M. She was examined immediately after by a night pupil in attendance, who discovered nothing unusual or remarkable. The woman remained quietly in bed until 8 o'clock A.M., when she got up and walked up one flight of stairs to another ward. At 9:30 she was examined externally by the Master, Dr. Quigly, in the presence of the internes. He found the abdomen unusually prominent, a diastasis of the recti, which enabled the fingers to feel the limbs of the child as though they were immediately beneath the skin. Above the pubes and slightly to the right side of the median line could be felt a smooth, resisting tumor, about the size of a child's head. It was freely movable, receded before the fingers, and was looked upon as being the child's head not yet engaged. The breech was felt on the left side of the mother, high up. The woman was very uneasy during the examination, complained of considerable pain on pressure above the pubes, especially on the left side. No fetal heart sounds were to be made out. An hour afterward a vaginal examination was made by the assistant, Dr. Glenn. He found the os well dilated and the head down in the vagina almost on the perineum. The tumor felt in the abdomen had now to be accounted for, and he suggested the presence of twins, or the possibility of a two-headed monster.

The woman seemed to be doing well enough, and so was left alone to nature, contrary to the American and the usual English custom of applying forceps, after a few hours, when there is no advancement of a well-engaged head. On Tuesday morning, however, the Master deemed it advisable to terminate labor by the application of forceps. This was about thirty hours after the admission of the patient to the hospital. The introduction of the first blade of the forceps was followed by the escape of a quantity of blood of a very dark color, which immediately aroused the Master's suspicions. The other blade being introduced the head and child were quickly delivered; the child was dead, and presented the appearance of having been dead about two days. The operator's hand was immediately introduced into the vagina, from where it passed through a rent into the abdominal cavity, where the placenta was found. Hemorrhage was now profuse, and immediate preparations were made for laparotomy, which was done in about ten minutes from the time when the first blade of the forceps was introduced. A quantity of thin, watery fluid was found in the abdominal cavity, probably in part amniotic fluid, and a number of large blood clots. The rupture was found to be across the posterior vaginal wall, with a vertical arm reaching downward and on the left side to the bottom of Douglas' cul-de-sac. An elastic ligature was passed over the uterus to its neck and drawn tight, and then the uterine arteries tied off on both sides; the hemorrhage ceased. The longitudinal portion of the tear was then sutured, the transverse portion, packed with iodoform gauze, being left open for drainage through the vagina. On removing the elastic ligature from the uterus bleeding recommenced, so it was deemed advisable to snare the cervix and amputate the uterus, the stump being fixed with pins extra-abdominally. In spite of the great loss of blood, the patient rallied well and did well for two days. But on the third day symp-
toms of peritonitis set in, and the patient died on the fourth day. The remarkable part of the case is the fact that the woman had probably been carrying the child and placenta loose in the abdominal cavity for thirty-two hours before the operation, and that the symptoms were so ill-defined and obscure. The sudden cessation of pain, the subjective feeling of malheur, the slight tenderness on pressure, and the presence of the second tumor in the abdominal cavity should probably have been sufficient for a diagnosis. But I need scarcely say these symptoms were all better understood after the laparotomy than before. On the other hand, there was no bleeding through the vagina previous to the application of forceps; the head had become firmly fixed, acted as an efficient plug, and did not recede on the expulsion of the body and the placenta into the abdominal cavity. Text-books say that the symptoms of shock can be very ill-defined and sometimes almost completely absent in cases of incomplete rupture where the peritoneum remains intact, and is simply pressed before the child's parts, forming a sac into which the child and placenta are expelled. But it is certainly unusual for a complete rupture to be attended by such slight symptoms. If (that terrible word if) the patient had not died of peritonitis, the operation would have been successful; and, if the child and placenta had not remained thirty-two hours in the abdominal cavity, the chances of peritonitis would have been much decreased. The German idea of waiting almost indefinitely on nature before applying the forceps is partly responsible for this case. The Master says now he will institute the rule of waiting only about four hours before applying the forceps, instead of almost indefinitely as heretofore.

JAMES B. BULLITT, M. D.
ROTUNDA HOSPITAL, DUBLIN, JUNE 25, 1892.

Queen Sophie of Sweden, being ill from a nervous trouble, her physician prescribed that she should sweep her rooms, light her own fires, cook her meals, and perform sundry other manual offices connected with housekeeping for a few months. The prescription "worked like a charm," resulting in complete recovery.

Abstracts and Selections.

A CASE OF LICHEN RUBER.—The case about to be detailed has been placed under the caption "Lichen Ruber," in the belief that so long as the schools of Vienna and Paris continue to disagree as to the identity of the "lichen ruber acuminatus" of Kaposi and the "pityrias is rubra pilaris" of Devergie, so long as such clinicians as Kaposi will hesitate to recognize the lichen planus of Wilson as a distinct pathological entity, so long as the terminology of the chronic papular dermatoses remains in the present unsatisfactory condition; when such a gathering as was witnessed in Paris two years ago, as well as that of last year at Berlin, failed, after mature deliberation in definitely establishing the constitution and limitation of the lichen group, so long will it be best to consider these terms as representing not fixed entities, but as convenient working names for provisional groups of uncertain definition, which, with the accumulation of fresh evidence, will be reduced to orderly arrangement, or perhaps, in some instances, abandoned.

It is not possible to-day to give such a clinical description of any of these types (except perhaps planus) as would please all. That which would be comprehensive enough to meet the demands of some would overstep the bounds insisted on by others. One may therefore be pardoned for classifying obscure, chronic, inflammatory, papular affections, which will not readily fall under either of the other accepted titles, as lichen ruber; there to be allowed to remain until further notice.

A. S., an Englishman, now aged sixty-six, has lived in this country since the age of eighteen. His family history is of the best, showing an unusual record of longevity and freedom from serious ailments. Patient himself is of fair physical development, although not robust, fair skin, blondish hair, but dark eyes, and is of a decided nervous temperament. During his early days lived a great deal out of doors, but for the last forty years has been an accountant, although always taking a sufficient share of exercise. Has never made use of tobacco or alcohol in any form, and has always limited himself to the plainest and most wholesome fare, being in every respect a man of regular habits. Has never been exposed to hardships or privation, but for years he was constantly overworked at his desk, often prolonging his labors far into the night.

Until the beginning of his present trouble his powers of endurance and health had been unusually good, the exceptions being, besides some of the affections incidental to childhood, an attack of malaria on first coming to St. Louis,
nearly forty years ago; sciatica (?) a few years later, from which he completely recovered; an alopecia areata thirty years ago, the hair on the affected parts having come out white, and so remained until now, the rest of the hair, even on the temples, not having commenced to turn, although the beard and mustache are quite white; enteritis and two attacks of bronchitis in the last twenty-five years, and a slight asthmatic tendency of recent development, making the full list of his illnesses. A dandruff had also existed with the usual exacerbations and remissions for many years, but without producing any noticeable thinning of the hair. His hands were prone to the occurrence of fissures in cold weather.

Some twelve years ago patient began to experience considerable pruritus about the bearded portions of the face and the scalp. This led to scratching, and to a habit of pulling out hairs one at a time, which, he said, seemed to relieve the itching which was apparently of a definitely localized character. In this way large patches, here and there, became deduced, which led him to shave clean, whereas he had up to that time worn a full beard.

This condition continued for some four years, when, in the fall of 1884, patient called my attention to a discoid patch on the right cheek, consisting of closely crowded but not confluent dark-red, firm papules, smooth, not scaly, pruritic, and which seemed to be adding to their number at the periphery. I shall not describe in detail every step in the process for the next four years, but will merely state that from that time the patch spread gradually, other patches and isolated lesions appearing about both cheeks, upper lip, and nose, being attended with increasing pruritus, and being in no way influenced by the measures, internal as well as external, which were used in the hope of relief.

The affection, and more especially its attendant subjective symptoms, were markedly affected by the temperature, being better in warm weather and worse in cold.

In the winter of 1888 the patient presented the following appearance: On the face were to be seen, covering each cheek, infiltrated patches, in which separate papules could still be distinguished. The eruption could hardly be described as being en nappe, as it rather presented here something of a nodular or hob nailed appearance from the papules still preserving their roundish outline though crowded close together. The color of the patch varied from a bright to a dark red, according to the temperature. The surface was quite free from scales. The thickened skin was somewhat suggestive of edema to the eye, but to the finger was quite leathery, hard and resistant, and, when examined in this way, revealed the fact that the infiltration extended to a considerable depth, the process being seated in and apparently involving the entire thickness of the corium. The deepening of the sulci was so marked as to call for special mention. About the temples and scattered about the periphery of the above mentioned patches were numerous isolated papules. These averaged from a quarter to a third of a centimeter in diameter, having a circular outline, never polygonal, rising sharply from the surrounding skin, of a hemispherical shape, bright or dark red, or brownish, or in some instances nearly approximating the color of the skin, smooth and shining, but not with the peculiar sheen and glister as though from a thin sheet of some translucent opaline medium, so often seen in lichen plans. They presented no trace of a scale. In a few instances a hair grew from the summit, although at no time could I satisfy myself of any constant relation existing between these lesions and the hair follicles. In only a few instances, and these about the face, could an exceedingly minute central pit be made out. They were firm, most of them as hard as variola papules, and intensely pruritic. The patient was constantly tearing them, provoking quite free hemorrhage, so that a drop of blood would often course down the side of the face from a wounded papule. Others, the sites of older traumatisms, were capped with blood crusts, while at other points the lesions seemed to have been quite torn away, leaving a raw and excoriated base. The scalp was also the site of pruritus, which seemed to be localized within limited areas and led to the inflicting of nail-lesions and the scratching and pulling out patches of hair. I could never make out any definite primary lesion here, with the exception of some scattered papules just within the hairy border over the forehead. These resembled those above described and never scaled or crusted.

On the anterior and outer aspect of each leg, but not disposed with exact symmetry, was a somewhat brownish red surface, covered with scanty, thin, papery scales in places, and at others free from them. No separate lesions could be made out, even at the edges of these patches, which were fairly well defined. They were infiltrated, intensely pruritic, and in every respect resembled and probably were patches of squamous eczema, though neither here nor elsewhere was there ever at any time the slightest discharge or exudation, the eruption being absolutely dry throughout. About this time there began to be some generalized pruritus, best marked about the anterior aspects of the thighs and about the forearms.

During the ensuing summer the lesions about
the face receded a little and the patient obtained a partial respite from the tormenting itching, but with the first approach of cold weather in the fall of 1889 all his symptoms reappeared with increased violence.

The patches on the cheeks now presented a somewhat different appearance, the papules having quite flattened out, but the involved area being thickened, of a harsh feel, although not scaly, and divided up into angular areas by the deepening of the natural sulci, this feature being more marked than ever. Similar but less thickened patches had developed by the coalescence of papules on the temples, and there was a broad patch on each side of the neck, extending posteriorly more than anteriorly. A number of new isolated lesions had appeared on the forehead, nose, and upper lip, some of the latter close to the vermillion border. The lower lip and chin were quite free and so remained. The new papules attained an appreciably larger size than those occurring earlier. There were some papules about the infra-maxillary region. The thickening of the skin of the face and exaggeration of its normal folds gave an appearance much resembling that of leprous leontiasis, which was heightened by the appearance of papules about the lobes of the ears.

Scattered over the entire body surface, but discretely, were a number of papules. The front and back of the thorax were about equally involved, but the extensor aspect of the arms rather more than the flexor. These papules were flatter than those on the face. The genitals were spared and there were but few lesions on the buttocks. The thighs presented many papules, and the legs were covered with a slightly scaly reddish-brown infiltrated sheet of disease, rough, but not nutmeg-grater like to the feel. There were a few lesions on the hands and feet, the palmar and plantar epithelium being dry and slightly thickened. Most of the finger and toe nails were thickened to many times their normal size, dry, brittle, broken in places, lusterless, and dystrophic. The skin on the hands as well as the finger and toe nails looked dirty on account of the general roughened and dystrophic condition, and the consequent almost impossibility of thoroughly removing the dirt, which seemed in places ingrained. The axillary, inguinal, and other glands were greatly enlarged, of almost stony hardness, but not painful or tender on pressure. About the eyelids were various tubercles, covered with dark but otherwise normal skin, more or less firm, somewhat acuminate, of the size of a pea or larger, and without subjective symptoms.

The pruritus was ferocious, so that the unfortunate sufferer would lie awake nights tearing himself until exhaustion brought a brief respite. His general health, however, continued comparatively unaffected. During the day the patient remained in comparative comfort, but on disrobing at night the consequent chilling of the surface would awake the itching which would continue as above described, although not so severe after the bed-clothes had become warmed by contact with the body.

Neither arsenic, nor antimony, which was also tried, ever had any appreciable effect in controlling the disease. Bromides gave a little rest at night. Unna's carbolic-sublimate ointment was now used thoroughly and with persistence. The benefit accruing therefrom although gradual was unmistakable. Not only was the pruritus relieved but the lesions began to disappear. This was continued until spring, by which time the patient's condition was remarkably better, the oldest and most thickly crowded lesions, to wit, those on the face, being less affected than those about the body.

The oncoming warm weather had brought about remission of symptoms, and during the ensuing summer patient was better than he had been for years and hopes of an ultimate cure were entertained. Last fall, however, with the cooler weather, he began to retrograde, though his condition did not become nearly as distressing as it had been the previous year. Early in October the patient met with a severe surgical injury which confined him to his bed for a month. What was my surprise to find that within a few days the disease began to fade away and disappear. In three weeks there was hardly a trace of it left. During this time and for the preceding six months the patient had received no treatment whatever. For about two months he remained perfectly free from all skin lesions, the nails nearly regaining the normal. Gradually, however, the disease began to return, and on August 1, 1891, there were to be seen a few scattered lesions about the face, arms, and legs, all very pruritic. The sites on the cheeks formerly occupied by thickened patches had taken on a different look, being tumefied but not divided up into polygonal spaces, and of a lighter red.

Believing that the study of the dermatoses composing the lichen group is still far from complete, I have essayed to set down with care the details in this case, as well as because of its presenting features in many respects differing from what has hitherto been recorded in this country.

Dr. Taylor's paper in the New York Medical Journal for January 5, 1889, being the American classic on this subject, has been the object of my careful study. Perhaps some of the peculiarities of my case will be best brought out
by setting them side by side with details taken from his description.

The disease began with the appearance of papules which were not "conical" but rounded, and soon became more markedly so, taking on what the doctor has so well called a "bee-hive shape." They finally, but not "soon," became flattened out and were lost in a general thickening of the integument, not "mainly of the epidermis," but seated, as in Hans von Hebra's cases, chiefly or altogether in the cutis. What follows in the note from which the quotations are made (p. 4 of Dr. Taylor's article) in regard to the deep corrugation, thickness, harshness and loss of elasticity of the skin would tally closely with the facts observed by me. As the parts most involved were not "submitted to much movement and stretching," there was no "production of deep fissures."

Although the case has existed so long it never passed into a distinctly scaling condition.

I shall sum up the description of this case so that a connected idea may be formed of those points in which it agrees with and those in which it differs from hitherto published descriptions.

An essentially chronic disease, showing occasional exacerbations and remissions, with one short intervening period of apparent cure, attended with no marked exacerbation or depreciation of the bodily health beyond that directly traceable to pruritus and its attendant insomnia occurring in an individual who had already had a neurotrophic dermatitis; its lesions passing through a very gradual process of evolution and finally merging into condition of general thickening and infiltration.

"Symmetrical in its distribution, spreading from the upper parts of the body downward." (Taylor.) Remaining for a long time localized on the face, and finally spreading uniformly but discretely over the whole body, and again receding.

The lesions seem to develop from the cutis and not from the corneous layer. They consist of firm red papules having a quite smooth surface and all the appearances of an inflammatory new growth, and only after very slow and gradual changes showing a slight tendency to desquamation. They are rounded in outline and profile, with, in a few instances, a very minute central pit.

Their relation to the hair follicles is somewhat problematic, but certain it is that the nutrition of the pilous system in affected regions is very markedly impaired.

In color they show considerable variation, which depends chiefly on atmospheric temperature. Aside from this factor, however, the color varies from one differing only a few shades from that of the normal skin to bright red, on the one hand, and dark red, or coppery, on the other.

The resulting pigmentation is light brownish and blotchy about the face and yellowish on the body when present.

The full sized lesions, from one fourth to one third of a centimeter in diameter, coalesce in places about the face and neck into patches marked by thickening and great deepening of the natural furrows of the skin, but nothing like the irregular, wooden, warty patches sometimes seen in lichen planus upon the extremities.

In old patches the nodular appearance from coalescence of lesions passes into one in which separate lesions can no longer be made out, and of uniformly deepened color.

The palms and soles become dry and covered with a thickened epidermis. Nails much thickened, distorted, and brittle.

Mucous membranes unaffected.

It will be seen that this case resembles those of Dr. Taylor's in its remissions and tendency to recovery, and differs from the cases observed by Hans von Hebra, who says that such a thing as a spontaneous disappearance of lichen ruber is unknown.

If it were not for a disinclination to use a complex terminology which will probably prove to be merely provisional, the designation lichen ruber obtusus might well be chosen as descriptive of this case. At no time, not even in the earliest stages, were the lesions acuminate.

It will be noted that this case presents some points of similarity to lichen planus. Some of points in which it differs are:

Absence of polygonal outline and of central depression of lesions. Absence of mucous glistening.

Distribution (face, general body surface, symmetrically; extremities implicated late and sparingly) and arrangement. (Never linear.) Involvement of pilous system and nails. — Joseph Grindon, Ph. B., M. D., in Journal of Cutaneous and Genito-Urinary Diseases.

The Therapeutics of Strontium.—In these days of synthetic chemistry and of research for new remedies, it seems strange that strontium, a mineral capable of forming a great number of crystallizable salts, a substance known to every school-boy for the marvelous beauty of its flame, should remain absolutely unknown in the domain of therapeutics. Its possible contamination with barium may have had some effect in producing this result—the bromide of barium being as far above the bromide of potassium in toxicity as the bromide of strontium is below it—but such a reason is
insufficient to account for the total neglect of strontium by the medical profession. Constantin Paul no doubt reflected the general opinion in regard to strontium when he said, "I knew little about the substance except that it formed part of the composition of the Bengal light; I did, however, know that it was one of the ingredients of Carlsbad water." This investigator has now used in his practice over six pounds of the lactate of strontium, and in no instance has he noticed any intolerance for the drug. Many other observers have also employed strontium, both in hospital and private practice, since M. Laborde read his paper on the innocuity of the salts of strontium before the Société de Biologie. This paper was read on the 4th of July, a day memorable to us by its exhibitions of strontium, but not in the medical sense, however.

After this paper was read a great many of the best French physicians used the drug, and, singularly enough, they all laid stress on the fact that strontium was not poisonous; in fact it appeared to be an efficacious remedy without any dangers whatever. M. Féré made experiments on rabbits with most all the mineral bromides, the intravenous injections being pushed to the lethal extreme. All the animals died in convulsions. The toxicity of the strontium salt was far below that of potassium; lithium and sodium required higher doses than strontium to produce death, but the convulsions produced by the latter were less marked. This observer has used the strontium bromide with good results in epilepsy, in doses of 80 to 90 grains a day.

M. Sée has employed the lactate of strontium in Bright's disease, in which it acts very favorably, principally through its influence on the digestive and assimilative organs. M. Dujaudin-Beaumetz has also reported very favorably in regard to the value of strontium where there is disorder of the digestive functions.

M. Constantin Paul published (Les Nouveaux Remèdes) details of twelve cases of Bright's disease treated by the lactate of strontium. As this drug is not a diuretic it might be given advantageously with diuretin-Knoll.

M. Paul concludes his paper as follows:

"Strontium is not toxic; it is not a diuretic; it diminishes the albumen well and rapidly in epithelial and parenchymatous nephritis, but it does not suppress it entirely; if the administration of the drug is stopped too soon, the albumen increases at once. The diminution of the albuminuria is followed by a very notable amelioration of the other symptoms, and the patient exhibits much improvement. The presence of fever, even intense, does not prevent the action of the lactate of strontium in parenchymatous nephritis.

"I have no personal experience in the use of the drug in maladies of the stomach, or of the bromide in epilepsy, but I administered the latter salt in a young woman the subject of hystero-epileptic attacks recurring at the menstrual period. These attacks had resisted the use of bromide of potassium in doses of sixty grains a day; the bromide of strontium given for two months in doses of ninety grains a day appears to have succeeded, as she has not had any attacks during that time."

The necessity for a perfectly pure drug, absolutely free from the presence of barium, is insisted on by all observers; and we are assured that the enterprising house of McKesson & Robbins, New York, have placed such a preparation on the market, in the form of lactate and bromide, syrup or solution, in pound bottles.

Neuropathic Insanity in Relation to Crime.—At the recent meeting of the Medical Society of Pennsylvania Dr. H. C. Wood read a paper on this subject. The author's conclusions are: Religious beliefs often run into insanity. Some are able to control their actions, but others, knowing they are wrong, yet cannot control them. One is reasoning insanity. Some can not rely on their own integrity. Hysteria is not madness, but a neuropathic state which may end in madness. Dipsomania is a normal attribute, the basis of many cases generally easily controlled. But vice alters the nerve centers, and it becomes insanity. If at first such could be controlled by law in an institution, they could be cured. Unfortunately there is no law to do this. You can't reform a nervous criminal. They have no fear of punishment. Society must protect itself; should recognize such and prevent them from breeding their kind. Isolate them for life, or if a change occur in their nerve centers and they regain the normal state, they may be safe. He would destroy all such if necessary.

College of Physicians and Surgeons, New York.—The chair of surgery at the Medical Department of Columbia University has been made vacant by the resignation of Dr. Charles McBurney. He has been appointed a professor of clinical surgery. A statement has been recently made which, if correct, will give to Dr. McBurney a very remarkable if not unique record in regard to the surgical treatment of appendicitis; his operations for that disease a few days ago numbered a round fifty, only one death.—Jour. Amer. Med. Association.
THE MICROBIAL ETIOLOGY OF MENINGITIS.

For many years back it has been supposed, if not believed, by the average doctor that meningitis, tubercular or non-tubercular, was a specific disease like typhus, typhoid, or cholera. Recent researches, however, seem to make of meningitis a pathological pot-pourri, and leave its etiology more bewilderingly mixed, if possible, than the etiology of puerperal septicemia.

The following bit of etiological hash will doubtless commend itself to the palates of such physicians as run after the latest fads; but the man of scientific training and logical mind must read it with a smile and a wonder as to what the next will be:

Mycobacterial Meningitis.—In the Johns Hopkins Hospital Bulletin for May, Dr. W. T. Howard, Jr., reports the case of an infant operated upon for imperforate anus in which the rectal wound suppurated. The child died in the second month, of purulent ependymitis, meningitis, and encephalitis, and a bacteriological examination of the pus from the inflammatory area showed the presence of a micrococcius, and of the Bacillus coli communis. The child had atresia of the pulmonary orifice of the heart and patency of the foramen ovale and of the ductus arteriosus, and the operator thought the febrileness of the circulation had favored the mixed infection by means of the suppurating rectal wound.

He calls attention to Netter's bacteriological examination of twenty-five cases of simple meningitis, in which the Diplococcus pneumoniae was found present in fifteen; the Streptococcus pyogenes in four; an intracellular diplococcus in two; a short, active bacillus, the bacillus of Friedländer, and a slender, small bacillus, respectively, in the three remaining cases. Monti also found the Diplococcus pneumoniae in the pus of four cases of meningitis; and the frequency of the presence of the pneumococcus is explained by the fact that meningitis is so often secondary to pneumonia and otitis media.

Besides these micro-organisms, Dr. H. M. Biggs reported, at a recent meeting of the Section in General Medicine of the New York Academy of Medicine, a case of meningitis in which he had found the bacillus of anthrax, although there had been no local focus of that disease on the body. It is interesting to note the variety of micro-organisms that may cause meningitis.

From the above it would seem that any thing in the shape of a microbial organism may be competent to set up meningeal inflammation. If this be true, then Pope did not strain science to any great degree when he wrote:

"Ev'n Button's wits shall turn to worms.
Which maggots wore before."

And of course we can not say that any inflammatory disease of any organ is due to any particular organism. If we must say this, then the doctrine of specificity in disease must be abandoned.

That our friends of the Johns Hopkins are doing much valuable original work in etiological research can not be denied; but the average doctor would be less in danger of death from cerebral congestion during this heated term if the magnates of this institution would kindly hunt down one microbe at a time, and not turn loose upon him a whole menagerie at once.

INTERNATIONAL DERMATOLOGICAL CONGRESS IN VIENNA.—The second meeting of the International Dermatological Congress will be held in Vienna from the 5th to the 10th of September, 1892. Many of the most distinguished representatives of dermatology and syphilography from all countries have promised to present papers, and the indications are that the meeting will be a great success from a scientific standpoint.

The Committee on Organization, through the President, Professor Kaposi, has extended a cordial invitation to the members of the American Dermatological Association and to those of the New York Dermatological Society and others interested in dermatology in this country to be present.
### Notes and Queries.

**Meeting of the Michigan State Board of Health, July 12, 1892.**—Relative to the reported presence of cholera in foreign countries and the possibility of its being brought to this country, Dr. Baker remarked that it would be a particularly unfortunate time if cholera should reach Chicago or Detroit, because it tends to spread in much the same ways as typhoid fever, only with much greater rapidity, and typhoid fever is unusually prevalent in Chicago, and appears to have been increasing lately in Detroit. If cholera should gain entrance to either city, so many of our people visit those cities that we might soon find cholera spread in many places throughout Michigan. This office is prepared to issue circulars, already printed, advising local health officers just how to restrict cholera.

Secretary Baker stated that during the quarter reports had been received and action taken on 451 outbreaks of the dangerous diseases in Michigan, including two outbreaks of smallpox, each confined to the first case; 1,091 pages of letter book have been used in copying the correspondence of the office (not including postal cards, printed, or hektographed letters). There were 2,159 pages hektographed, of which 1,068 were notices to health officers of infected immigrants destined to their localities. During the quarter there had been received, mostly in exchange for publications of the Board, 387 journals (weeklies, monthlies, and semi-monthlies) and 65 books and pamphlets, making the total number 8,229 in the library of the Board (excluding journals not yet bound).

The Secretary presented the subject of infected immigrants, and to illustrate a point read a letter from a township health officer stating that he had found isolated and vaccinated the person of whom he was notified as possibly infected with smallpox, also reporting his action concerning one of the immigrants, of whom he had received notice, who had come down with measles. The expense incident to these cases was about $17. He thought the national government might go a step further and detain at the seashore those immigrants likely to be infected.

**The Mississippi Valley Medical Association** will hold its eighteenth annual session at Cincinnati, Wednesday, Thursday, and Friday, October 12, 13, and 14, 1892. An excellent programme, containing the best names in the valley, and covering the entire field of medicine, will be presented. An address on Surgery will be delivered by Dr. Hunter McGuire, of Richmond, Va., President of the American Medical Association. An address on Medicine will be made by Dr. Hobart Amory Hare, Professor of Therapeutics and Clinical Medicine, Jefferson Medical College, Philadelphia. The social as well as the scientific part of the meeting will be of the highest order.

The Mississippi Valley Medical Association possesses one great advantage over similar bodies, in that its organic law is such that nothing can be discussed during the sessions save and except science. All ethical matters are referred, together with all extraordinary business, to appropriate committees; their decisions are final, and are accepted without discussion. The constitution and by-laws are comprehensive and at the same time simple. Precious time is not allowed the demagogue or the medical legislator. The officers of the Pan-American Medical Congress will hold a conference at the same time and place.

E. S. M'Kee, M. D.,
Secretary.

**The sixth annual meeting of the American Orthopedic Association will be held in Room 39, at the New York Academy of Medicine, September 20, 21, and 22, 1892.** The Association will be called to order daily at 9 A.M. There will be an afternoon session at 2 o'clock. At noon on Tuesday and Thursday the Association will go into executive session for the transaction of business. On Tuesday evening, at 8 o'clock, Dr. Lewis A. Sayre will receive the members and guests of the Association at his house, No. 285 Fifth Avenue. At 8 o'clock on Wednesday evening the annual dinner will be held in the banquet-room of the Academy of Medicine. The charge will be five dollars per plate, and members are requested to notify the Treasurer at the earliest possible day of
Their intention to participate, and accompany this notification with a check for the number of places desired, with names of guests.

President, Benjamin Lee, M. D.; Vice-Presidents, R. H. Sayre, M. D., H. L. Taylor, M. D.; Corresponding Secretary, Royal Whitman; M. D.; Secretary and Treasurer, John Ridlon, M. D., 34 Washington Street, Chicago.

Committee on Membership, E. H. Bradford, M. D., A. J. Gillette, M. D., Samuel Ketch, M. D., DeForrest Willard, M. D., L. E. Weigel, M. D.

The World's Fair, Entomological and Botanical Specimens from Kentucky.—The undersigned has been authorized by the Commission to prepare an exhibit of the plants and insects of Kentucky for the World's Fair, and would be pleased to receive contributions of specimens from collectors, teachers, and others interested in these lines of natural history. Full credit will be given on labels for all material so contributed. Local collectors who have specimens which they are willing to loan for the Fair are requested to write to me for further information. The more characteristic plants and insects of localities are especially desired. They may be sent to me fresh or after being prepared for the cabinet. All herbarium specimens of plants must be suitable for mounting on sheets of regulation size (11½ x 16½ inches).

H. GARMAN,

Phenacetine in Urinary Troubles of the Aged.—Dr. Traill Green reports (University Medical Magazine, June, 1892), some cases of frequent micturition in the aged, in which immediate relief was obtained by the use of phenacetine in a ten-grain dose at bedtime. The effect continued during the day, and the frequency both day and night was reduced to about normal. In two of the cases the number of micturitions was reduced from six or seven nightly to one, and in one case the patient did not get up at all during the night. The quantity of urine was not diminished, and it does not appear that it was necessary to use phenacetine continuously to get its useful effects.

SPECIAL NOTICES.

An next Armour's digestive ferments advertised in our pages, the British and Colonial Druggist has the following in its editorial columns: "To those who can recall the interest which attended the first introduction of crude pepsin, early in the 60's, and who can remember the insatiably, evil-smelling agent, and often almost inert body which was wont to be employed those days, and which was generally nothing more than the dried scrapings of the stomach, such as is, unfortunately, still official in the Pharmacopoeia, the elegance and activity of the preparations now under notice will appear little short of marvelous. We have, for the sake of comparison, tested the various forms of Messrs. Armour's pepsin side by side with various other brands of powdered pepsin, employing for comparison the official test of the B. P. We expected to find that the American brand would exceed in activity the official requirements, but we were surprised to note the superiority of this brand over those from other sources. As a rule we are strictly loyal to the B. P., but in the matter of pepsin we should certainly not advise the pharmacist to use the official article unless at the express direction of the physician, so far does it fall below the activity of the Armour brand. Similarly we find the scale pepsin produces a perfect pepsin wine, the disintegrating power of which, as shown on a piece of lean meat, is quite surprising. This scale pepsin has the further advantage of being perfectly soluble. In addition to pepsin in the form of scale and powder, a very active glycerol is also prepared, ten minims of which are equivalent to one grain of active pepsin; and, for convenience in traveling, etc., the firm also furnish well-made tablets, each containing three grains of active pepsin. Equally important and active as the pepsin bodies are the various preparations of pepsin, the same makers supply.

"Paraldehyd" possesses many of the good without the evil qualities of chloral. Used in Insomnia resulting from various causes. The objectionable taste of the chemical is, to a great extent, disguised in Robinson's Elixir Paraldehyd (see this journal), which is an elegant preparation.

In prescribing the products of Manufacturing Pharmacists, we should be guided to a great extent by the business standing of the manufacturers. No other house in the South or West has a better reputation for strict integrity than the Robinson-Pettet Company, Louisville, Ky. We do not hesitate to recommend the preparations advertised by them in this journal.

The attention of our readers is called to the advertisement of Robinson-Pettet Company, which appears in this journal.

This house is one of long standing, and enjoys a reputation of the highest character.

The preparations referred to, we commend specially to the notice of Practitioners.

We call the attention of our readers to the advertisement of the Robinson-Pettet Co., Louisville, Ky., which will be found on another page of this issue. This house was established fifty years ago, and enjoys a widespread reputation as manufacturers of high character. We do not hesitate to endorse their preparations as being all they claim for them.
Original Articles.

COMPARATIVE MERITS OF INGUINAL AND LUMBAR COLO TOMY.\(^6\)

BY JOSEPH M. MATHEWS, M. D.

The only excuse I have for consuming your time on this subject is, that much has been written of late concerning colotomy, but, as far as the preference goes, it seems to be all on one side, in favor of the inguinal operation. It appears that we have "fads" in a surgical as well as a society way.

A society fad will die in a given length of time in order that a later one may take its place; a surgical or medical fad will be short-lived unless it has sufficient merit to support it. Many of them have been tried, but found wanting. To-day the "fad" in colotomy work is in doing the inguinal operation. Has it sufficient merit, when contrasted with the lumbar operation, to supersede the latter, or, indeed, hold its own? I have been chided a little by my surgical friends for still doing the lumbar operation in the face of such strong advocacy of the "easier and simpler operation." Really some would have us believe that to do the operation in the loin smacked of old fogeyism, and others consider it quite obsolete. But it must be remembered that it was the inguinal, not the lumbar operation, that fell into disrepute with surgeons, good surgeons, and that it is really just recently resurrected; and, in truth, any thing resurrected never did seem to me quite so good as a thing that never had died.

\(^6\)Read before the Surgical Section of the American Medical Association, at Detroit, June 7, 1892.

As a reminder, you will permit me to say that the iliac or inguinal operation was suggested by Littré in 1710, not as a method of relief for cancer of the rectum, as so often practiced in the present day, but for the relief of infants born with imperforate bowel. This idea of Littré's was carried into execution by Pillore in 1797. It was in 1796 that Callisen proposed the lumbar operation, but it did not go into effect until 1839. Now, some would have us believe that the inguinal operation was of very recent date, and that this new (?) operation was rapidly displacing the old one; but it will be observed by these dates that it is nearly two hundred years old, and that the lumbar operation was not done for about forty years after the inguinal had been practiced. It is worthy of remark here that colotomy was not looked upon with much favor until within quite a recent date. It is also a matter of history that the lumbar operation stood the test of time much better than the inguinal.

Now, I desire to state, before arguing the merits or demerits of either operation, that I am not a very strong advocate of colotomy at best, which means with the best indications for doing the operation. In a paper read before the International Medical Congress (Surgical Section), 1887, entitled "When is Colotomy Justifiable?" I gave the following as my conclusions:

1. I do not believe that colotomy is justifiable for cancer of the rectum when such growth can be excised.
2. In strictures or obstructions of the rectum, located within three and one half inches of the external sphincter muscles, colotomy should not be done.
3. The operation is not warranted in cases of ulceration of the rectum, even when accompanied by strictures, if they be within reach of the finger.
4. In cases where the operation is looked upon as a dernier ressort, I do not think it should be performed, except for total obstruction located above the reach of the finger, and not malignant.

In looking back at these conclusions, and that too after seeing much written in favor of the operation, and doing it myself, I do not see that I have anything to take back. Since Kraske has given us his admirable suggestions for the removal of the rectum, I am more inclined than ever to deal locally with all affections of this portion of the gut, and avoid as far as possible the disgusting operation of colotomy.

My reasons for the conclusions as given herein were:

1. That the operation does not materially prolong life.

2. Admitting that life could be prolonged, I doubted the advisability of the operation.

3. In many cases the operation hastened a fatal termination outside of any danger in doing the operation.

4. That pain was not relieved by the operation, and that in many cases of cancer of the rectum pain was not a factor at all.

If I was asked now what the indications for colotomy were, I would answer: (1) In cases of cancer of the sigmoid flexure, not rectum. (2) In syphilitic ulceration, accompanied by stricture, either in the sigmoid flexure or the unattached rectum. (3) In cases of recto-vesical fistula.

In cases of congenital malformation of the rectum I would not advise the operation, but would do it if asked by those nearest to the child in kinship.

In that phase of the question does not come within the province of this paper, I will not discuss either the conclusions or the assertions herein mentioned, but make the bare statement suffice.

To come, then, directly to the point. If the operation of colotomy is decided upon, which of the two, the inguinal (or iliac) or the lumbar operation is preferable? With all reference to the distinguished gentlemen who advocate the iliac operation, I must say that I prefer the lumbar. I am very well aware of the fact that I am talking against great odds, and, admitting that there is strength in numbers, yet there is somewhere in the statute books a declaration that the "minority must be heard." You will permit me, therefore, to give some reasons for the "faith that is in me," and to answer, if I can, some of the arguments adduced in favor of the inguinal operation.

1. It is asserted that it is much easier to do colotomy in the inguinal than in the lumbar region.

In answer to this I must say there is some truth in the statement; however, it will not always hold good. Admitting, for the sake of argument, that it the easier of the two operations, I would answer that this is no argument to a surgeon. It might be easier for one to extract a stone from the bladder by the perineal section, but it may be much better to do a supra-pubic cystotomy. A surgeon should be competent to do either operation, and not put forth his inability as an argument in favor of one or the other. If it is contended that it is a safer operation, this would materially alter the case. But is it a safer operation? I know that the advocates of the inguinal operation say that it is a very simple affair. To read the off-hand description of it one would be so convinced, but the surgeon who has done many of these operations will verify my statement that a colotomy done in the iliac region is sometimes more difficult than when done in the right or left loin. It is a fact that, in the majority of cases, when the cut is made into the peritoneum the small intestines present, and that when they do a search must be made for the colon. This has been my experience when doing the operation, either upon the cadaver or the living subject. Now this search is of course within the peritoneal cavity. How difficult this search is I have only to appeal to those who are in the habit of doing this operation to testify. As regards the simplicity and the safety of the two operations, I think that the anatomical characteristics can determine the matter. One is extra-peritoneal (lumbar); the other is intra-peritoneal (iliac).

With all the assertions and declarations of many as to the perfect safety in dealing with the peritoneum, I must again affirm that if
two operations are offered to accomplish the same end, one that requires the cutting into the peritoneal cavity, and the other accomplished outside the cavity, I believe the latter preferable. In other words, that it is safer not to cut into it than to cut into it. Doubly so, is this true when a long and sometimes a rigorous search has to be made for the colon. The lumbar operation is extra-peritoneal, and has been so regarded from the time it was first suggested. I am acquainted with the fact that Mr. Herbert Allingham tries to prove that the cavity is oftener opened than is supposed, but I have no reason to dispute so eminent an authority as Mr. Thomas Bryant when he says, "In the 170 lumbar colotomies that I have performed I have but twice knowingly opened the peritoneal cavity." Now it might be argued that since antisepctic and aseptic surgery has come into vogue, the danger of the iliac operation has been materially lessened. This, of course, we would have to admit in a general way at least, but I would submit: Better antisepctic surgery can be practiced in doing the lumbar than the inguinal operation, for in the former we are not working in the cavity, and said cavity is a sacred precinct against antisepctic solutions, which would debar their use in the inguinal operation. What good might accrue in this scientific surgery would be in the lumbar operation. In doing the inguinal operation it is frequently necessary to enlarge the opening enough to admit two fingers instead of one; at least this has been my experience, for with one finger it is impossible to either find the colon or handle it after it is found. And one point I wish to especially impress: In drawing the colon down, which often lies high up toward the navel, great care must be taken not to twist it. Some surgeons in doing this operation have been forced to use rectal insufflation of air in order to find the colon. I have never, however, had to resort to this. I need scarcely allude to the fact that it is sometimes difficult to draw the colon out because of its distention by gas or feces, or because of a diseased or contracted mesentery. In this connection I may mention that which to my mind is a serious objection to the inguinal operation, viz., if it has been done for malignant disease the can-

cerous infiltration may have extended to the wall of the colon, and the operation in so far as the site is concerned would have to be abandoned. Again, if the mesentery is in a very contracted state it would prevent the establishment of an artificial anus. To the lumbar operation none of these objections can be preferred, and I must maintain that they outweigh any and all of the objections that have been preferred against it. In the first place, in doing it we are not dealing with the peritoneal cavity, Mr. Allingham to the contrary notwithstanding; hence we are not running the risk of handling the colon in a diseased state. The colon, usually present in the lumbar operation, is easily secured and attached; there is no danger in dealing with a bowel infiltrated with cancerous material, because we are distant from the site of the disease; no danger of twisting the bowel on itself; nor indeed is the operation followed by any of the serious complications which attend the one in the groin. I shall not take your time to answer such objections as the following to the lumbar in favor of the iliac operation, for they have all been forcibly and with great reason answered by Mr. Bryant, in the Bradshawe lecture, in 1889:

1. That by means of the abdominal incision, the diagnosis in obscure cases may be verified before the bowel is opened.

2. That by it there can be no possibility of the surgeon mistaking the small intestines, duodenum, or stomach for the large intestine, and that abnormalities of the colon do not mean failure of the operation, since the abdomen can, by the inguinal operation, be carefully searched.

3. That the bowel can be readily drawn out of the wound and fixed firmly to the skin.

4. That in lumbar colotomy there is frequently so much prolapse of the gut as to give rise to serious trouble.

5. That the inguinal wound is far more convenient to the patient for purposes of cleanliness, as well as for the adjustment of pads to guard against the escape of the feces and flatus.

In summing up, I will be pardoned in saying that from a theoretical view and by a prac-
tical demonstration in my own practice, I am forced to believe that the inguinal operation has not and should not supplant the lumbar operation as a surgical procedure.

Treves statistics compiled in 1881: 58 in every 100 cases of lumbar operations, and 46 in every 100 cases of iliac, died within twenty-one days after the operation. Bryant: 62 per cent of lumbar and 54 per cent of iliac operations were successful.

LOUISVILLE.

PROGRESS IN PRACTICAL MEDICINE.*

BY WILLIAM BAILEY, A. M., M. D.
Professor of Materia Medica, Therapeutics, and Public Hygiene, University of Louisville.

Your Committee on Progress in Practical Medicine begs leave to report that this has been a busy year with the doctor, yet it must be confessed that no very striking evidence marks the speed in his advancement. Unfortunately the work of the doctor is not capable of the pyrotechnic display that has characterized the great progress made in late years by the surgeon. His work is more silent and unobtrusive, yet none the less important. It may require much more of both knowledge and skill to conduct to favorable termination a case of pneumonia or typhoid fever than to amputate a leg, or to perform a laparotomy. Yet the impression made by the surgeon is much greater than that made by the doctor.

Much faithful work is being done in the laboratory and at the bedside, and it may be confidently hoped that we are perhaps on the eve of important results. It must be confessed that all has not been established that we hoped for a year ago, but the work done will not be in vain, for it is yet believed that it is in the right direction, and that these failures may prove the stepping-stones to ultimate success. We had hoped that the claims made by the too ardent friends of Prof. Koch might be found to be well grounded, but the hope born of our desires was destined to perish with experience.

It is reasonable to expect that a more intimate knowledge of pathogenic germs with their various toxins and toxic products, and their influence on the economy will lead to very important results, and that general medicine will at least gain some of the benefits that have accrued to surgery. It is a more difficult problem to bring to bear germicidal influences in the economy than it is in the field of surgery where it is safe to apply the most deadly agents without hurt to the patient. The surgeon freely avails himself of the power of bichloride in the destruction of agents that were heretofore so hurtful to man when the subject of trauma, but it is not yet possible for the doctor to occupy the system at large with this or any other medicament so destructive to germ life without doing harm to the man.

It is hoped that the day will soon come when it will be possible to destroy the specific agents or germs now so potent in the causation of disease, or that the body of man may be made unfit for their development. The higher aim of our profession, preventive medicine, may yet accomplish what curative medicine has not been able to do. Let us wish godspeed to Koch and a host of other workers in this most laudable endeavor.

It is perhaps safe to say that a larger number of the human family have been ill in the last year than ever there was before in the history of the world in the same length of time. All eyes have been turned in one direction by virtue of the pandemic that has prevailed. Influenza and la gripppe have become household words. No other age in the centuries in which it has prevailed, has been so favorably situated for the study of its specific cause than this, and yet it has been most difficult of absolute demonstration. The cry has been, lo here, and lo there, till confusion has been often worse confounded. Consensus of medical opinion is that some specific cause must be operating to produce such specific results, and that most likely the cause is in some specific germ and its products operating through or by means of some general agent, as the atmospheric air. The spread of the disease has been too rapid to be accounted for by any ordinary contagion, for oftentimes thousands of persons in a single city have become the subjects of the disease in a day. The cause must be found in some thing common to the use of all mankind, so we must look for it in air or water. Of all the claims

*Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Society.
Catarrhal affections have not been very fatal unless in the extremes of age or in those already enfeebled. Most frequently the catarrh has been limited to the air-passages, or extending thence to the lungs. Again, the catarrh has been gastro-intestinal.

The fever and its concomitant symptoms have been such as occur in many other infectious diseases, the pain being perhaps more severe than in most of them, and likewise more widespread. Some of the cases have simulated breakbone fever, some migraine, etc. The impression made by the germ or some of its toxic products upon the nervous system has been most decided.

The toxemia influencing the nerve centers gives rise to many of the disease processes. This is the most plausible as well as the most ready method of explaining much of the phenomena observed.

Simulation and partial paralysis of the pneumogastric with vaso-motor disturbances best account for the processes observed in the respiratory apparatus. This influence on the origin of the vagus also accounts for the enfeeblement of circulation so often observed. Indeed, in most of the cases the nervous depression and mental disquiet is out of proportion to the apparent severity of the attack. Many people, sick for a day or two, show the exhaustion of weeks of ordinary illness. A long essay would not exhaust the features of the disease in this aspect alone.

It was most difficult to get the average patient to appreciate the gravity of the affection, for often persons endeavored to fight it off till supervening nervous exhaustion admonished them to surrender. Very few diseases have presented such various pathological changes, or have been followed by such a variety of sequelae.

Time will not permit me to even enumerate the many changes in the nervous system. Neuroasthenia is not uncommon for a long time after an attack. Persons who surrendered at once and took to the bed did much better than those who continued their usual avocations. The most successful management of the uncomplicated disease in my hands was by suitable salts of quinia and the coal-tar derivatives so recently

made for its discovery or detection, none are so plausible to me as those made by Dr. R. Pfeiffer, of Berlin.

He is assistant to Prof. Koch, of bacillus-tubercule fame, in the Institute for Infectious Diseases, and we may well believe that his work is done in that orderly and painstaking way so characteristic of Prof. Koch. He claims to have discovered a form of bacillus in the purulent brochial exudate of all cases of la grippe examined; that the bacillus is rod-shaped, often arranged so as to form a chain, but that it is not a diplococcus, as has been claimed by some observers. He thinks that was a mistake due to the fact that the rod at the pole or end takes a different shade in coloring from the middle, and hence might appear as a diplococcus. He claims that a large number of control experiments demonstrates that they are not found in other diseases, as simple bronchitis, pneumonia, phthisis, etc; that with the disappearance of the purulent bronchial exudate the germs disappear. This germ is small and difficult to demonstrate for the reason that it does not take readily stainings ordinarily used. Also, that from its small size and slow development it is liable to be overshadowed by other germ-growths in the same specimen. All this, however, can be overcome by careful work, and no doubt we will soon know very well this unwelcome but universal visitor.

P. Canou has found in the blood of patients during the fever of la grippe a rod-like germ which Prof. Koch says is the same as that found in the sputum by Pfeiffer. We conclude that this or some other specific germ of wonderful propagating power operates by means of the atmosphere in the production of this disease. It might be interesting, if time allowed me, to discuss this disease as it has come under my observation in the last three years, but I hope this will be more fully done by my confidére, Prof. Ochterlony, who, I see by the programme will recite his observations on this subject.

With the introduction of the specific cause and by its products we have quickly developed a clinical history at once decided but varied. The phenomena are usually catarrh of the mucous membrane, fever, and a very decided impression upon the nervous system.
introduced to our consideration. Of this group I have been inclined to favor phenacetine, because it gave the best results with the minimum of danger by heart depression.

In regard to this group, known to us chiefly as antipyretics, I want to say that we have in them remedies of great value, and I believe their possibility for good is but feebly appreciated. I think, as we understand better their physiological action, we will find them potent for good for many purposes beside the reduction of temperature. They exert very positive influences over the nervous system, but until their action is more fully understood and their modus operandi is determined, we can not assign to them their proper place in our armamentaria.

No one will be more conscious of the imperfection of this report than your committee, and but for the fact that he was unwilling for the first place on the programme to be vacant this paper would not have been written.

LOUISVILLE.

SQUINT.*

BY WILLIAM B. MEANY, M. D.

While errors of refraction are important factors in the production of squint, yet the surgeon who neglects to keep strict account of the disturbed muscular functions will find the result of his attempts to correct the obliquity entirely negative.

Surgical interference for the correction of squint is a binocular proceeding, and should only be resorted to after a thorough study of the motility of each eye separately, and both as regards their relation and their reciprocal movements.

A thorough consideration of the factors influencing the movements of the eye in the commencement will aid us materially in the treatment.

The factors favoring convergence are, lowering of the plane of vision, fixing near objects, exercising of the accommodation, while the absence of fixation for near objects, raising the eyes, repose of the accommodation by the aid of dark-smoked glasses, the instillation of atropine, paralysis of the accommodation, diminished convergence, and favor divergence.

Every measure taken to re-establish binocular vision facilitates the cure in a strabismic subject. If, for example, a convergent squint having developed at an early period of life be operated upon without first submitting the patient to a tonic treatment, orthoptic exercises, and especially the stereoscope, or the use of other well-known measures to further diminish the squint, we may expect not only a return of the original trouble, but we can almost with a certainty predict an overcorrection resulting in a disfiguring divergent squint that may cause an endless amount of trouble to counteract.

By submitting a child to the therapeutic treatment detailed above, I have witnessed a squint of 30° rapidly diminish to 15°. We may proceed surgically without fear to correct the remaining 15° of convergence, having derived from therapeutic measures all the advantages they have furnished. The following case may prove interesting:

A young man, nineteen years of age, applied for treatment, as he states it, "for loss of sight in the right eye." Ophthalmoscope examination reveals:

Left eye, hyperopia total................. 3.5 V−1
Right eye, hyperopia total............... 3.5 V−0
Right eye, convergent strabismus apparent, 52°

Angle K (angle between the lens of fixation and the radius of the cornea, which passes through the pupil)+10°.

Therefore we have a case with a total convergent strabismus of 52+10=62°, an exceptionally high degree. Field of fixation measured by the perimeter:

<table>
<thead>
<tr>
<th>LEFT EYE</th>
<th>RIGHT EYE</th>
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<tr>
<td>External</td>
<td>Internal</td>
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<tr>
<td>32</td>
<td>47</td>
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<tr>
<td>Instead of normal,</td>
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It will be readily observed that the field of fixation is strongly limited to the outer side of both eyes. Binocular vision absolutely abolished, and probably never existed.

It was found impossible to provoke the union of the two stereoscopic images or even the sim-

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* Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Society.
ultaneous vision of such with the stereoscope. For prudential reasons chloroform was administered.

A tenotomy of the internal and advancement of the external recti muscles was practiced in the right eye. The internal rectus muscle was found to be enlarged and exceedingly strong; the external rectus very weak, narrow, and flattened. A slight resection of the tendon was made. Atropine having been instilled, both eyes were securely bandaged. Antiseptic dressings of mercuric bichloride 1 to 5,000 being used. Both eyes were kept bandaged until the removal of the thread on the fourth day. The eye operated upon was again bandaged, the opposite was left free and provided with its connecting glass +6D. The fifth day after the operation the bandage was removed and a +6D glass provided for the right eye.

The hyperopia proved to be of six dipters in each eye. On a careful examination of the eyes a slight tendency to convergence persisted. The eyes were again examined the ninth day after the operation, and instead of a total apparent strabismus of 62°, as existed before treatment, it was found to be one of 10° only.

With a stereoscope furnished with convex 12 diopeters for each eye, the patient unites the images when they are separated by a distance of 60 millimeters.

Stereoscopic exercises were ordered, and to be continued daily. After several days use of the stereoscope, the patient having learned how to observe his optical impressions, indicates (one eye being covered with a colored glass) distinctly a monocular diplopia for each eye. The two monocular images appeared to be very near each other, separated by six or seven centimeters, when the object, a flame, is placed a distance of five meters.

The eighteenth day after the operation, with a colored glass, revealed, first, crossed diplopia, which was corrected by a prism of 4°; immediately afterward, without apparent change in the direction of the eyes, homonymous diplopia appeared, that was corrected by a prism of 10°, corresponding to a convergent squint of 5°.

It was observed that the patient appeared to fix by alternating with two different parts of the retinae. This monocular diplopia shows by the fact of the strabismus two places of perception, or better, two maculae are formed in each eye, and explains why the following days the patient developed a homonymous and sometimes a crossed diplopia.

Twenty-eight days after this patient was operated on the apparent strabismus had practically disappeared; with a colored glass a distant flame, though first seen in homonymous diplopia, the patient quickly unites with the two images.

The binocular vision persists up to a ½ m. (14 cm.), so that with hardly a month's treatment he has obtained almost normal amplitude of convergence.

\[
P_{c} = 7 \text{ m a}
\]
\[
K_{c} = 0 \text{ m a}
\]

The patient now unites the stereoscopic images with a distance of 73 mm.; which shows the increasing strength of the diverging power, with simultaneous contraction of both external recti muscles.

A one to two hundred solution of atropine has been dropped into the eyes daily since the operation.

Does not the history of the foregoing case illustrate that a cure was possible only with a combined tenotomy of the internal and advancement of the external recti muscles, followed by orthoptic and stereoscopic exercises as well as the correction of the existing error of refraction? I am quite sure the results would not have been the same had we dispensed with any one of the measures resorted to in the treatment.

THE MODERN TREATMENT OF TRACHOMA.

BY W. CHEATHAM, M. D.

Professor of Ophthalmology, Otology, Laryngology, and Rhinology, Louisville Medical College.

The modern treatment of this most formidable disease of the conjunctiva with which we have to deal has rendered its management much more easy to the ophthalmologist. It is not my intention in this article to give a review of the different methods pursued to reach

Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Association.
the one end, but to speak of the one giving me the most satisfactory results. A patient with acute trachoma or true granular lids applies for treatment. What is to be done? Under the old methods most of them will go on to chronic granulation with all its bad results. I take a cataract knife because it is cleaner than the thin-bladed "silicenneur" of Johnson, and will give about as good results, and scarify well the palpebral and cul-de-sac conjunctiva. I then, with a pair of Knapp's forceps, grasp the conjunctiva and compress and squeeze out all trachomatous bodies and enlarged follicles; treat upper and lower lid alike. I then irrigate thoroughly with boric acid solution, and send the patient home with directions to use the solution every two hours in an "eye bath," and if there is much reaction to apply cold cloths. Usually there is no reaction, and but little after discomfort. I do not use general anesthesia; instead instill several times a ten-per-cent solution of cocaine muriate. But little treatment outside of this bath is given for several days. If there are any granulations left the operation must be repeated, or the usual old treatment in such cases can be tried for several days. Under this treatment cases which used to take for relief months are now cured in as many weeks, and with but little or no damage to vision. I operated several days ago on a case of trachoma, with the cul-de-sacs filled with enlarged follicles. When the lids were everted, great rolls would present, larger than a lead pencil. Under slight trimming and compression, this case was cured in two weeks, with vision 20/20, which under the old treatment would have been on hand for months, with vision much impaired as a result. There is some difference in the management of acute and chronic granular lids and the follicular form. But when the modern method is pursued the result as compared to the old is simply marvelous, not only in length of time of treatment, but in result. The operation is a very short one, and I find patients anxious to have it performed. When there is much pannus I still use pulverized jequirity. My faith in this remedy in suitable cases is increasing daily.

LOUISVILLE.

Societies.

LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, June 24, 1892, Dr. T. L. McDermott, Vice-President, in the chair.

Dr. W. L. Rodman: This young man is a patient that I operated on six weeks ago to-day, and reported the case the same night at meeting of the Medico-Chirurgical Society at the Pen- dennis Club. He had a tumor in the inguinal region caused by enlarged glands, the mass being as large as a duck egg. I cut down upon the glands and dissected them all out. Dr. McDermott assisted in the operation. The operation was done on Friday afternoon, and he went to work the following Wednesday. It was one of these idiopathic enlargements. Patient has had no venereal disease. I removed eight or ten very much enlarged glands, cutting very nearly down to the femoral artery. By the operation I think I saved this patient at least six weeks' suffering, and believe that this is the best way to treat these enlarged glands.

Dr. C. Skinner: I think this case illustrates a point, and proves that these cases all ought to be operated upon in this way. There is no doubt about such cases always going on to suppuration. I believe it is better to remove the glands in the start rather than allow suppuration to take place and then open them. The results in Dr. Rodman's case seem to be every thing that could be wished.

Dr. Rodman: When the operation was performed the patient was very much run down in health. He has gained at least ten pounds since being operated upon six weeks ago.

Dr. Turner Anderson: I would like to ask about the scar that is so plainly visible now; will it disappear after a while?

Dr. Rodman: I think it will go away. This scar would not have been as marked as it is now if I had not kept the wound packed. I did not want it to heal too soon.

Dr. Anderson: What do you think will be the effect upon the lymphatic structures upon which these glands act situated below? That is, will it interfere with their functions in any way?

*Stenographically reported by C. C. Mapes, Louisville.
Dr. Rodman: I do not see how it would interfere with the channels; the lymph gets back in some way without any doubt. The deeper lymph glands were not removed.

Dr. T. L. McDermott: There are a great many glands in this region, and I do not think it is reasonable to assume that they were all removed.

Dr. Rodman: I removed all the superficial glands.

Dr. S. G. Dabney: In this connection I would like to ask one or two questions about enlarged isolated lymphatic glands. I saw a case the other day, a young lady, having enlarged glands just back of each ear. There seemed to be no cause for this condition; the lady was otherwise in perfect health. There was no involvement of the cervical glands, but simply the glands just back of each ear were enlarged and quite tender. I would like to ask if there is any reasonable explanation of the appearance of these isolated enlarged lymphatic glands, and what the treatment should be; also, whether the treatment of iodine ointment is of any value.

Dr. Skinner: I have always found that we can trace this down to some hereditary trouble, some specific lymphatic engorgement. Cases of this character, that have come under my observation; I have put on treatment consisting of a preparation containing bichloride of mercury. They may feel and look all right, but the lymphatic system is out of order, the circulation bad, and the treatment should be with a view of improving these conditions, and then the enlargements will disappear.

Dr. Rodman: I would like to ask if Dr. Dabney's patient had any bad teeth.

Dr. Dabney: That is a point I had not thought of, and made no inquiries concerning the teeth.

Dr. Anderson: Enlargement of the posterior cervical glands is not at all unusual, occurring in an acute form. In the last epidemic of German measles this symptom was present; it was present in nearly all cases; an enlargement of the chain of glands of the neck was one of the prominent symptoms. I do not think that we have any reason to believe that there is anything specific about these enlargements. I believe it is simply acute adenitis, catarrhal in all probability in a great many cases. My experience is that those enlargements go down without any treatment. They occur just as we sometimes see enlargements of the inguinal glands occur in an epidemic way. I saw an epidemic of inguinal adenitis several years ago, a great many cases presenting themselves. We are constantly seeing cases of idiopathic inguinal adenitis.

Dr. McDermott: Concerning the removal of these enlarged inguinal glands, this is a matter that is not pushed far enough by the medical profession. I think that the doctors in ordinary practice, who meet most of these cases, instead of suggesting that they be left to the processes of nature, allowed to suppitate and the abscesses finally be opened, allowed to take their course, should advise the early removal of all these enlarged glands. People, as a rule, are not educated to the idea that this is the proper treatment. This young man may be the means of getting a half dozen of his friends to submit to this operation. I believe that the profession ought to take more cognizance of these cases and advocate operation more than they do, and educate people to this idea. The result in Dr. Rodman's case seems to have been all that any one could wish. I am satisfied if the operation had not been done the patient would have been coming to my office two or three months, would probably have spent two or three weeks in bed, and had the enlargement lanced with a good deal of pain, etc. I think, on the plea of economy, it would be cheaper for patients to have these glands removed. I believe that enucleation is the only proper treatment, and we should try to educate people to have this done.

Dr. Rodman: I have been operating in this manner for two or three years.

Dr. Skinner: While on the subject of glands I will relate a case. Some time ago a gentleman brought his boy, about seven years of age, to see me. The whole family history is phthisical, one sister of the mother having died of this disease, and the mother having had two or three alarming hemorrhages. This child had an enlargement of the sub-maxillary lymphatic in the right lower jaw midway between the
angle and the symphysis, which was very tender on pressure. He had been to see a dentist and had one tooth extracted; another tooth in the vicinity appeared to me to be loose. I gave it as my opinion that it was one of two things, either tuberculous or an epulis, rather inclining to the belief that it was tuberculous gland. I asked him to let some one else see it. He took the child to another physician; an examination was made and the physician advised them to wait, that he did not think the bone was involved at all, and let it suppurate, then open and scrape it out. I had advised immediate removal of the gland. I want to ask the members of the Society present which of the two procedures would have been preferable, that is, granting that it was a tuberculous gland, would it not have been better to have removed the sac and gotten rid of all the tubercle bacilli, in order to prevent further infection of the system, rather than to let it suppurate?

Dr. Anderson: Was the cavity of the tooth still open?

Dr. Skinner: The effects of extraction had disappeared, but another tooth seemed to be loose. The child passed out of my hands, and I learned afterward that this gland was scraped. The family history pointed strongly toward tubercular infection.

Dr. Rodman: I should judge from what Dr. Skinner has said about the case and the history, that it was most likely of a tuberculous nature. I fully agree with him that the only thing to have done was to dissect out this chain of large glands.

Dr. Anderson: How long had the large glands existed? the loose tooth, etc.

Dr. Skinner: I think about four weeks.

Dr. Anderson: I do not think I would have advised any operative procedure in such a case. It is doubtful whether supputation would have occurred. With a history of only a few weeks I think it would have been very active surgery, and believe I would have waited a little longer before advising an operation.

Dr. Rodman: It is only a question as to whether you open before suppuration has taken place. It is a very easy matter to remove these glands by making an incision along the inner angle of the jaw. I have never seen an acute abscess form in that situation, and believe they are all tubercular.

Dr. McDermott: A little fellow about four years old was brought into my office some time ago having such an enlargement on the bone. I treated this with warm applications, and it disappeared in ten days or two weeks without suppuration. I think our action in these cases should depend a great deal upon the character of the infection; if it seems to be spreading, increasing rapidly, or if any symptoms point toward softening, then I believe radical measures should be adopted.

Dr. Dabney: I reported a case to the Society some months ago of a child who had paralysis of some ocular muscles of the right side, the external rectus muscle of the right eye, and partial paralysis of the same side of the body, both upper and lower extremities. I reported at the time that the history was the child had sustained a fall; also had an attack of meningitis, both of which, however, were so long before the appearance of the paralysis as to have hardly caused the lesion. I merely want to say that the child has since died. I have never seen the patient since, but learn it died of meningitis.

Dr. Anderson: I would like to continue some reports of cases. The child (clinical case) that I presented at the last meeting of this Society, suffering from acquired hydrocephalus, died a few days ago. The man I exhibited having the irregular pulse is now anasarca; has a very well-marked tumor in the epigastic region, which seems to be the left lobe of the liver. Still has disturbed circulation, and is simply growing worse all the time.

Dr. Skinner: I want to mention a peculiar case of laparotomy performed at the City Hospital a short time since for double ovarian cyst. One cyst was about the size of a large coconut, and was absolutely without a pedicle. I never saw any thing like it; the cyst was only fastened by adhesions. I separated adhesion after adhesion, expecting of course to find a pedicle, but when all the adhesions were broken the tumor simply fell out upon the table. The other cyst was smaller, about the size of a goose egg, lower down and more firm than the larger one. This was tied off and removed.
The large cyst, having no pedicle, I suppose had simply lived from the adhesions which had sprung up around it. The woman has done well; has had no fever.

Dr. Anderson: What was the condition of the ovary on the side having the larger cyst?

Dr. Skinner: I could not find the ovary; it was probably lost in the mass alongside the tube.

Dr. T. S. Bullock: I saw this case and was very much surprised that there was no pedicle. The tumor was lifted up to the abdominal wall and its own weight broke the attachments and it fell on the table. I never saw any thing like it.

Dr. Anderson: Did you examine the structures after the cyst was removed?

Dr. Skinner: Yes, every thing was examined carefully.

Dr. Anderson: Might it not have been a par-ovarian cyst?

Dr. Skinner: Possibly, but the ovary could not be found. The other ovary was found, the cyst on that side not having gotten so large.

Dr. Rodman: What was the character of the fluid in the cysts?

Dr. Skinner: It was about the color of urine, about like ordinary serum.

Dr. Bullock: I noticed Dr. Skinner tie something which he supposed was the pedicle of the large cyst, but afterward found it was not.

Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT]

Leprosy in Siberia; Sir James Paget and the Progress of Pathology; Tooth Culture; Treatment of Clavicular Dislocation; The Gold Cure; The Outbreak of Scarlet Fever; Professor Huxley and Sir Henry Roscoe.

Miss Kate Marsden has furnished particulars of the horrors she has witnessed during her recent journey in Siberia, which was undertaken to obtain specimens and information concerning a plant which is stated to be a cure for leprosy. At Yakutsk she especially found leprosy in all its horrors. Not the slightest care was taken of or provision made for the poor sufferers. Upon a person being attacked by the disease, they were driven out of the place, and were not allowed to have any intercourse with their fellow creatures who remained untouched. At some miles distance from the place wretched huts, half in the ground, were made, and in these the afflicted found shelter until exposure, disease, and hunger destroyed them. Without clothing, save such as a few sheepskins would provide, they endured the hardships of a Siberian winter or the heat of summer, their only food being the bark of trees or rotten fish left them by those relatives who took the trouble to remember them. The lepers were found, with limbs rotting off, living in a fearful state of filth and vice. Miss Marsden intends to return almost immediately to found a colony for the alleviation of the suffering of these unfortunate sufferers. With regard to the plant, she collected specimens, but obtained only scanty information concerning its efficacy as a cure for leprosy.

A new clinical theater has been added to the National Hospital for the Paralyzed and Epileptic. In an inaugural address, Sir James Paget referred to the great progress the pathology of the nervous system had made. Year by year facts had been accumulating in the line of accurate anatomical and microscopical research, and applications of electricity and other factors necessary to the study of the nervous system. One of the fruits of the investigation had been the localization of the several faculties of the brain. Sir James went on to say that the license or diploma to a surgeon declared that on the day it was issued the person who received it was fit to practice, whether he was fit to practice that day ten years must depend entirely upon himself, because no subjects were so rapid in their growth as medicine and surgery. He ventured to say that no man was fit to practice twenty years after he had received his license unless he had constantly been a student.

The address of Sir J. Crichton Browne on "Tooth Culture," delivered at Cambridge, has attracted much general attention. He especially referred to the alarming increase of decay of the teeth in this country, especially among the young, and stated that as the result of a
recent investigation among 1861 children under twelve years of age, there were only 104 with normal teeth in need of neither extraction or filling, and only 26 per cent of infants at five years of age had teeth free from decay. In Leeds 90 per cent of the teeth of the population were bad, and in England 10,000,000 artificial teeth were used annually. The increase of dental decay he ascribed to the pulpiness and softness of modern food, which obviated the necessity for mastication, which promoted the flow of saliva and scrubbed the teeth, to the removal from all breadstuffs of the outer husks of the grains, which are the chief source of a chemical element called flourine, which is essential to the formation of the enamel of the teeth, to the nervous tension of modern existence interfering with the growth and nutrition of the teeth, and to the growth of large towns in which the atmosphere is loaded with bacteria injurious to the teeth.

Surgeon-Major Hamilton has drawn attention to a very effective way of putting up a cure of dislocation upward of the outer end of the clavicle. He places a very large pad in the axilla, and then passes round the injured arm and body a piece of soft inelastic webbing about one inch and a half broad; this is made to overlap three or four inches, the ends being securely stitched together. Another piece of the same material is attached by stitches to the belt at the back, slightly to the left of the middle line, brought firmly over the displaced clavicle, on which is placed a pad secured in place by a few stitches to the webbing, the strap passing over the shoulders is secured to the circular band in front. In order to maintain downward traction, he passes a perineal band from the circular belt behind to a buckle attached to it in front. The hand and forearm is carried in a short sling. It is only necessary to undo the perineal band when going to stool. Dr. Hamilton finds that this apparatus secures absolute fixity of the arm and shoulder.

The Calcutta Zoological Gardens' management is about to construct a snake-house, in which will be found a specimen of every poisonous snake in the country. If funds can be provided, a laboratory will be constructed for the purpose of investigating every description of snake-bite, and Dr. Cunningham, F. R. S., president of the committee, will take an active part in the superintendence. The various remedies suggested will receive proper attention, and scientists interested in the question will have an opportunity of exhaustively dealing with the subject. It is hoped that the government will assist the institution.

The Funeral Reform Association has been holding a series of meetings in London. They have exhibited a tent designed for the protection of mourners at the grave side. Resolutions were adopted in favor of simple earth-to-earth burial, with the use of antiseptics, and recommending authorities to take special precautions for the preservation of the health of mourners in inclement weather.

At the recent meeting of the Society for the Study of Inebriety, the following resolution was adopted: "That the meeting of the Society for the Study of Inebriety, of which the members are registered British medical practitioners, is of opinion that any so-called 'cures' for inebriety, the composition of which is not disclosed, are unfit to be recommended by honorable members of the medical profession, who are to place the full details of their treatment before their professional colleagues, a requirement as essential in the interest of the public as it is consonant with the disinterested practice of scientific therapeutics." Further, a resolution was adopted, declaring that as "the alleged bichloride of gold cure" showed no trace of gold or of chlorides, and contained 27.55 per cent of alcohol, the meeting unreservedly condemned the prescription of such an intoxicating preparation to an inebriate.

The president of the weekly meeting of the Metropolitan Asylum Board stated that the extent of the epidemic of scarlet fevers in London has been exaggerated. The ordinary summer increase of the disease commenced this year earlier than usual, but the fact has led naturally to the hope that its periodic decline may also be earlier. The total number of cases 2,247, spread over the whole metropolis, is only one in 2,000 of the population. In comparing the present pressure upon the public hospital accommodation with past years, it was pointed out a large allowance must be made
THE AMERICAN PRACTITIONER AND NEWS.

for the consideration that these institutions are much more used now than formerly, and that the compulsory notification of infectious disease brings a greater number of cases to light.

The acceptance of Professor Huxley of the post of president of the Association for Promoting a Professional University in London has given general satisfaction. The first action of the Association will be to give evidence before the Royal Commission on University Education in London. It is hoped that Sir Henry Roscoe will accept the position of vice-president.

LONDON, July 1892.

Abstracts and Selections.

Pus in Urine — How to Discover its Source.—At a recent meeting of the New York Academy of Medicine, Dr. Keyes opened the discussion on the above topic. He said that the question could be discussed in a general way. He would assume in these general discussions that no knowledge of the cystoscope or the endoscope was necessary, and only a very slight knowledge of microscopy. It is a fact that a great many physicians are not acquainted with what pus is. Pus is not the healthy mucous cloud that always collects in the urine; it is not an excess of that mucus; it is not bacteria; it is not phosphates. Pus in the urine is in the form of a granular deposit, dirty white or pinkish in color, or it may have a stringy appearance which is called by some stringy mucus. There is no such thing as stringy mucus. The stringy form of pus indicates that some portion of the genito-urinary tract is in a condition of abrasion or ulceration, and that there is decomposition of urine, and with the pus mucus is present. It means catarrh of some portion of the genito-urinary tract. These shreds that occur in the urine are practically of three kinds: the linear, the tadpole shred, and the fleecy, cotton-like thread. The linear shred, as a rule, may be presumed to come from the anterior urethra. The origin of the tadpole shreds is limited to no particular area; they may come from a little follicular abscess or from a granular or excoriated spot in the membranous urethra. The fleecy, cotton-like shred is generally from the prostatic sinuses; if spermatozoa are present, it is more than presumptive evidence. When the pus exudes from the meatus, it is almost conclusive evidence that the trouble lies anterior to the bulbo-membrane junction, although occasion-
mcut holds good. If the urine contains a lot of granular pus, with perhaps one half per cent of albumen (by weight) you may be almost certain that you have a case of pyelitis.

Another exceedingly good way to differentiate these two conditions is by washing the bladder. You first have your patient pass his water in two parts, each of which is opaque. Then pass a soft catheter into the bladder; if you find that he was not able to empty his bladder completely, it is presumptive evidence of cystitis. Through the catheter wash the bladder with a salicylic-acid solution until it is perfectly clean. Let the patient rest for an hour and then urinate; if the urine is still very cloudy, then it is probable that the pus comes from the kidney.

Dr. Heitzman did not consider the tests spoken of by Dr. Keyes as sufficiently exact. Ofttimes a combination of diseases exist; for instance, an enlarged prostate combined with a pyelitis. The speaker thought that the only way to make a diagnosis in these cases was with the aid of the microscope.

Dr. Otis stated that he placed considerable importance on the amount of albumen found in connection with the pus. Where true pus is present you always find a certain amount of albumen. That is one of the diagnostic points as to whether the pus comes from the bladder or the kidney. Whenever you have the pus from the kidney, there is always a certain amount of nephritis going on in that kidney and a certain amount of albumen. There are other chances of error; one of them has not been spoken of and is rarely mentioned is the sympathetic albuminuria that accompanies inflammation of the prostate or about the trigonum.

Dr. Brown inquired with reference to the last point brought out by Dr. Otis, the sympathetic albuminuria, whether the supply of albumen comes from the inflamed part, or whether it is really a sympathetic albuminuria, the supply of albumen coming from the kidney.

Dr. Otis replied that the albumen comes directly from the kidney, and is probably due to a certain amount of inflammatory obstruction at the urethral orifice. This has been demonstrated by experiments on animals.

Dr. Alexander stated that he thought no definite rule could be laid down with reference to the relative amounts of pus and albumen present in cystitis. In the earlier stages of cystitis, the amount of albumen is very small, but it will gradually increase, owing to the disappearance of the protective epithelium of the bladder. Another point to which Dr. Alexander called attention was that in examining for posterior urethritis, the morning specimen of urine should be selected, because during the day the water is passed so frequently, on account of the urgency that exists, that sufficient pus may not flow back into the bladder to cloud the urine.

Dr. Taylor referred to the co-existence of polyuria with pyelitis.

Dr. Alexander said the question of polyuria may be very misleading in cases of tuberculous of the bladder in the early stages. You have there polyuria with perhaps very little pus in the urine.

Dr. Brewer inquired whether you could differentiate between bladder and kidney pus by the specific gravity of the urine. Also whether kidney cells are always present in the latter case.

Dr. Keyes replied that he did not think the specific gravity could be depended upon in making the differential diagnosis. As to the kidney cells, he thought they could always be found in pus from the kidney. They may be mistaken for cells from the neck of the bladder.

Dr. Fordyce referred to one point of technique in the use of the microscope. Instead of using a high power lens, he uses a low power lens with a high ocular, and in this way gets a broad field. Casts and urinary sediment which otherwise might escape observation, may frequently be seen by distributing the urine uniformly over a glass slide without cover glass. In this way a much larger surface is obtained for a preliminary examination.

Encysted Stone, with Growths of the Bladder.—William R., a barber by trade, aged fifty-two years, had been confined to bed for some two years at the time I was called in consultation to visit him. The history given me of his case was as follows: About five years ago he first noticed trouble when passing his urine, and soon after had slight hemorrhage from the bladder. For the last four years he always passed a quantity of blood whenever he attempted to urinate, and for the last three years he had been unable to pass a drop of water save by the use of a catheter; during the last two years he had been confined to his room and most of the time to his bed. He gave me no history of having at any time had an attack of renal colic, although he had passed from the bladder in 1887 two small calculi.

During the past five years he had been under the care of several physicians, who had diagnosed his case one of prostatic enlargement, and little more had been done for him than to teach him how to introduce a soft catheter and evacuate his bladder.

At my first visit, early in May, 1890, I introduced a sound without difficulty, and at once detected the presence of a good sized
stone. There was no enlargement of the prostate, although there was a good deal of vesical irritation and the urine loaded with pus. Owing to the condition of the bladder, and the general condition of the patient, I advised a cystotomy in preference to the operation of litholapaxy, to which he at once assented, and I operated on the 6th of May, 1890. By preference I selected the medium method and opened the perineum in the line of the raphe, as is usually done; passing my finger into the bladder it came at once in contact with a large sized stone. When the first gush of urine was passed, it was followed by about four ounces of thick creamy pus; taking hold of the stone with the forceps, it was found to be very soft, as it broke down under the slightest pressure. The bladder was then carefully washed of its debris, mucus, pus, and fragments of stone, with a warm solution of boric acid, and then carefully explored with the sound and the finger. In this exploration I was not, at first, able to detect any remnants of the stone, but after introducing the sound again, to be assured that the bladder was clear, I detected a rough spot on the left side of the bladder, situated about the point at which the ureter at that side enters the viscous. Introducing my finger again, I detected the rough side of a stone, which was encysted, and leaving a spot about the size of a ten-cent coin uncovered. This spot corresponded with the entrance of the left ureter. I could trace distinctly the outline of the stone, and feel that it was so large that its removal would be impossible unless by freely opening the mouth of the sac to enable me to turn it out with the scoop or extract it by the forceps. This being the only possible way by which the stone could be turned out of its bed, I determined to slit open the mouth of the sac, as the only way to reach it with the forceps. I appreciated the fact that I was acting against all surgical precedents, in thus cutting into the wall of the bladder, but no alternative remained, I must either slit the sac or leave the stone—I decided upon the former. To effect this, a long, narrow-bladed, probe-pointed knife was guided along my finger until the edge of the sac was entered, and a straight incision made to cross the diameter of the stone; after this was done, considerable difficulty was encountered in dislodging the stone, first with a lever and then with the forceps. Its chipped and broken surface shows the resistance which it offered before it was at last turned out of its bed. The bladder being carefully explored was now thoroughly washed with a hot borated solution, and a glass drainage-tube left in the wound. He reacted well, and no further difficulty was met with. Being compelled to leave the city on the next day, I placed the case in the care of Dr. C. H. Mastin, jr., with instructions to keep the bladder well drained, and to wash it out each day with the boric solution. All went on well until the night of the 11th, five days after the operation, when the doctor was sent for to see the patient, as the tube had escaped and the urine ceased to flow, pain being the consequence. Upon his arrival he found the tube had been pushed out, and the wound plugged with a mass of soft tissue, which at first he thought was a prolapse of the mucous membrane. Examining it carefully he discovered it was detached, and removed it by gentle traction, whereupon it was followed by a gush of urine, and the patient entirely relieved of the pain which he had been suffering for several hours. The specimen in the vial is the growth (specimen shown); it was very much larger than it now appears, having shrunk from long immersion in alcohol used to preserve it. The patient made a good recovery, and his health was vastly improved, he being so well as to resume his usual avocation, when a year after he began to show signs of kidney trouble, and soon thereafter died from uremic saturation. The interesting facts in the case are, the stone encysted at the mouth of the ureter, where it probably had become entangled after the passage from the kidney along the duct in its way to the bladder. It is interesting to note that he had never suffered from an attack of renal colic. The large size of the specimen can only be accounted by the fact of the accretion which had taken place upon its surface, as the urine percolated through the duct and around the sac which contained it. The entire cortical portion of the stone was chipped off in the attempt to remove it, and the most of it washed away by the douche. A fragment of the cortex which is contained in the little box will, when added to the stone, give an idea as to the original size of the calculus. The growth must speak for itself, for no section of it having been made, I am unable to explain. Most probably it was a pedunculated polypus, which hung from the anterior wall of the bladder in front of the internal meatus of the urethra, and, as a valve or trap door prevented the patient from passing his urine by falling forward and closing the meatus; when the catheter was introduced it could, of course, be easily pushed aside, and no difficulty experienced in evacuating the bladder. I confess I did not detect this growth at the time of the operation, when I made a most careful exploration of the bladder and its entire cavity. Being accustomed to pass my finger
into the bladder, I can not now comprehend how it was possible for so large a body as this to have escaped my touch and recognition. Nor can I account for the manner in which it lost its attachments several days after the operation, as I am very certain that it was not interfered with by the forceps at the time of the operation.

I present the specimens as unique, and because I am not aware of a similar case being on record.—Dr. C. H. Mastin, Journal of Ophthal- nean and Genito-Urinary Diseases.

Conditions Demanding Excision of the Globe of the Eye.—As a rule, the question of the propriety of enucleating an eye will be referred to the specialist, but there are cases of emergency in which the general surgeon is called upon to act promptly. In the consideration of this subject we are at once confronted with it from two different standpoints, according as we have to deal with blind eyes or with those in which there is a more or less useful degree of vision.

In the case of blind eyes, the objections to the operation are two: (1) the danger of the operation per se; and (2) the cosmetic appearance. Meningitis has occurred in some cases operated upon in the acute stage of suppurative panophthalmitis. In these cases the removal should be made as soon as the evidences of suppuration are unmistakable. In cases of lacerated or penetrating wound with loss of vision, the operation is better done before suppuration occurs, or as soon as the evidences of suppuration are sufficiently plain.

There is no one condition for which eyes are so frequently excised as in sympathetic ophthalmitis (threatened or actual). The pathology of the sympathetic process is still a matter of controversy. In a case presenting the irritative symptoms indicating the beginning of sympathetic ophthalmitis, with the other eye lost from injury, or certain forms of disease yet to be mentioned, it is the duty of the surgeon to advise in the most unqualified manner the enucleation of the blind eye. The irritative stage is usually short. It is more or less rapidly followed by diminution of vision, due to an organic lesion. In the acutely inflammatory stage of the sympathetic disease, the removal of the "excitor" is not so beneficial to the "sympathizer," and may be harmful, adding fuel to an already flaming fire. In these cases the operation should be postponed until the active process is subdued. It must also be remembered that in a small number (perhaps about ten per cent) the sympathetic inflammation may come on after the removal of the excitor, and in about two per cent it has been thought to have been the result of operation. The conditions liable to give rise to sympathetic ophthalmitis are: (1) injuries; (2) diseases. Injuries: (a) lacerating or perforating wounds, so severe that the result will inevitably be atrophy of the globe; (b) the lodgment of a foreign body in the interior of the globe; (c) a penetrating wound involving the ciliary region. Diseases: (a) recurring or chronic irido-choroiditis from whatever cause; (b) atrophy of globe following purulent keratitis, or panophthalmitis, or in which ossific degeneration of the retina has taken place; (c) atrophy of the globe from any cause with painful ciliary lesion. Time does not confer immunity against sympathetic disease. There is considerable difference as to liability to the disease in the various injuries and diseases. This sequence is more frequent after injuries than after non-traumatic diseases, and of injuries nothing is so potent as the lodgment of a foreign body in the eye.

The pain which comes from the intra-ocular pressure of a chronic glaucomatous degeneration is frequently so excessive as to justify the removal of the offending organ, other means of treatment having failed.

Various diseases of the eye leave the organ in conditions so inconvenient or repulsive in appearance that the surgeon's aid is sought for purely cosmetic purposes. Are there, however, no procedures that may be substituted and so severe a mutilation avoided? In earlier days of ophthalmology, abscession of the anterior segment of the globe was often practiced. In this operation more or less evisceration of the contents of the globe takes place. As a matter of fact, the result is about the same as after enucleation, and sympathetic ophthalmia may follow the operation. The opinion of the author was decidedly against such risky procedures; enucleation of the mis-shapen eye, with the introduction of an artificial eye, is the only admissible operation. The modern expedient of tattooing a white cicatrix of the cornea without staphyloma has resulted in sympathetic disease.

The enucleation of blind eyes that are the seat of phosphenes, but like many operations undertaken to relieve a symptom of nerve irritation, its utility is doubtful.

In regard to the enucleation of eyes only partially blind, it goes without saying that a condition of things which can allow it to be seriously contemplated must apply with greater force to eyes already blind. The chances of accident or independent disease to the remaining eye are sufficiently great to justify the statement that nothing but the certainty of ultimate blindness, or of death, can permit us to consider such a procedure.
Most of the intra-ocular tumors are sufficiently dangerous to life to demand the removal of the organ in which they are contained as the only hope that can be entertained of successfully combating their encroachment. They are of two classes, the granulomata and the sarcomata.

The extra-ocular growths are of greater variety of histological structure. In sarcomata of the orbit removal of the globe is often required, even when not implicated in the disease.

Should an eye which retains an appreciable degree of vision be removed in order to arrest a threatened or prospective attack of sympathetic disease in the fellow? It is certainly unjustifiable to remove an injured but still seeing eye, though it may be an excitor of sympathetic disease. The result of the operation has not been sufficiently successful in arresting the progress of the malady after it has begun to warrant its recommendation. The only condition in which it was considered justifiable to remove a still seeing eye, for sympathetic disease, is where a foreign body remains in the eye. In these cases sympathetic disease is very apt to follow.—Dr. W. H. Carmalt before the American Surgical Association.

Tuberculocidin.—Since the announcement made by Koch, more than a year ago, that he had discovered a substance which had a selective action on tubercle, many observers have been working on the properties of this substance, which he named tuberculin. Foremost among such has been Klebs. In the Deutsche Medicinische Wochenschrift, 1891, No. 45, he reported that by precipitation with platinum chloride and the so-called alkaloid reagents he was able to separate from tuberculin an active principle, which he termed alexin or tuberculocidin, which has the same action on tubercle that tuberculin has, but without causing the depression produced by it. Klebs has since published a monograph on the subject—"Die Behandlung der Tuberculose mit Tuberculocidin"—of which a short abstract is given in the Medical News (New York) of April 16, 1892. Klebs believes that the efficacy of this substance depends upon an influence exerted on the tubercle bacilli, resulting in their degeneration. Thus large doses, by causing rapid disintegration of tuberculous tissue, produce some elevation of temperature by a form of auto-inoculation with tuberculin. Tuberculocidin does not cause necrosis of the affected tissues. The process appears to be one of involution associated with exudation. That this body is not merely an attenuated form of tuberculin is demonstrated by the fact that although the former represents by weight one fortieth of the latter, an injection of a decigram (0.1) of the one is followed by no elevation of temperature, while an injection of two milligrams and a half (0.0025) of the other is followed by febrile reaction. In man the initial dose of tuberculocidin is about two milligrams (0.002); if this occasions no unpleasant manifestations, the dose is rapidly increased to a decigram (0.1), or a decigram and a half (0.15). Hectic fever is no counter-indication—in fact, energetic treatment may cause its disappearance. The injections should be made daily for a month, and then intermitted for the same length of time, to be resumed or not according to the indications present. When urgent symptoms occur other therapeutic measures may be advantageously employed in conjunction with the injections. Nearly a hundred cases, principally of pulmonary tuberculosis, have been treated with tuberculocidin. Of seventy-five, in which a reasonable time had elapsed, fourteen appeared to have been cured, forty-five were improved, fourteen remain unimproved, and two died. Complications were universally absent. Such results are certainly encouraging; but after recent experiences medical men are skeptical about accepting as an absolutely curative measure the treatment of tuberculosis by injections of substances allied to tuberculin. Many, however, are still of opinion that the reaction against Koch's method of treatment went too far, and much interest will be felt in watching the outcome of the numerous investigations now in progress that have for their object the treatment of such a widespread disease as tuberculosis.—London Lancet.

Auto-intoxications.—Albertoni draws from his experiences the following conclusions: (1) In the human body there is a continual development of toxic substances. (2) The principal seat of their development is the intestine, and, in the first place, the large intestine, while they originate in a lesser degree in the muscles, in the glands, and in other tissues. (3) The best known process which causes auto-intoxication is putrefaction. (4) The known substances which come into play in the intoxication are: Peptoxine, organic bases (leucomaine, ptomaine), products of the aromatic series (indol, skatol, phenol, aromatic acids, etc.), lactic acid and volatile sebacic acids, ammonia, methan, hydrosulphuric acid, methylmercaptan, aceton. (5) Many of these substances are forming incessantly during state of health, albeit in small quantities, different according to individuality. (6) The mechanisms which limit or prevent auto-intoxications are: In the stomachic-intestinal canal the presence
of hydrochloric acids, other acids, glucose, etc., in the other organism destruction of the toxic substances by oxygen and their rapid elimination. (7) All conditions tending to induce an alteration of said mechanisms may become the cause of auto-intoxication; accordingly, in the first place, diseases of the digestive tract, diseases limiting the intervention of oxygen (anemia, chlorosis, etc.), and diseases which cause a violent destruction of tissues. Diseases of the organs of secretion and elimination are always apt to induce an indirect auto-intoxication. (8) Fatigue and over exertion, isolation, fasting, lead to auto-intoxications in consequence of increased and abnormal development of regressive products, which it is not possible to secrete and transform with the necessary rapidity. (9) Many pathogenic micro-organisms may induce a secondary auto-intoxication by giving rise through their activity to the formation of specific toxic substances in the various tissues. (10) General diagnosis of auto-intoxication has its principal element in the discovery of known toxic substances in the urine, the feces, the liquid secretions, or the tissues. In this connection the discovery of sulphuric acid, phenol, indican, acetone, ammonia, diamine, the alkaloids, pepton, oxybutyric acid has attained a positive importance. The toxicity of urine has failed as yet to reach much importance, although it is sometimes a serious element. (11) Among the forms of auto-intoxication which have been most investigated we have to mention, besides those resulting from retention of uric and biliary elements, the acid auto-intoxication, the auto-intoxication originating from aromatic substances (nemopyralytic auto-intoxication), the auto-intoxication caused by diamine (mystic peptonism) and acetonemia. (12) Auto-intoxication is most frequently observed as a complication in other diseases; this fact is difficult to explain. (13) A fundamental question in the theory of auto-intoxication, as well as the biologic transformation of matter generally, is the question of its anaerobic origin in the interior of tissues, as in the putrid fermentations of toxic products, and how the intervention of oxygen influences the process of auto-intoxication. (14) The discovery of action has mere significance as demonstrating the presence of a process of auto-intoxication than the toxicity of acetone itself. (15) The toxines deserve an attentive investigation with regard to the agents giving occasion to auto-intoxications—From Proceedings of the Fourth Italian Congress for Internal Medicine, in Rome; Pacific Record of Medicine and Surgery.

Experiments with Snake Poison.—We gather from a late number of the Pioneer Mail that an opportunity has arisen—in connection with the construction of a new and improved snake-house at the Calcutta Zoological Gardens, which will contain specimens of all the principal poisonous snakes in the country—of making experiments in a systematic manner with snake poison for scientific and practical purposes. Considering the loss of life in India attributable to this cause, it is a matter for the Imperial rather than for any provincial government of that country to take up, and the Lieutenant Governor of Bengal has, it is understood, addressed the government of India on the subject. It is proposed to fit up a small laboratory in connection with the snake-house for the purpose of prosecuting inquiries bearing upon the pathology of snake-bite and cognate subjects, and of testing by experiment the various alleged remedies for snake-bite which are from time to time brought to notice. The Calcutta Zoological Gardens would offer opportunities for instituting such inquiries which probably could not be had anywhere else in the world; and Surgeon-Major D. D. Cunningham, who is eminently fitted for organizing and initiating such a work, and is president of the committee of the Zoological Gardens, will, it is believed, be willing to render effective aid in the matter.—London Lancet.

Emulsified Vaccine Lymph.—An interesting review of the present status of vaccination has appeared in the Medical News, May 14th, by the pen of Dr. John V. Shoemaker. No country has, in recent years, given a more scrupulous attention to the production of lymph than Prussia. Dr. Shoemaker has been supplied by the Berlin Institute for Animal Vaccination, which is in charge of Dr. Pissen, State Councilor of Health. This institute was established in 1865, and Dr. Pissen has been a contributor to the literature of smallpox prevention since 1868. The lymph products of Dr. Pissen have become so favorably known in the country of their origin, that they are exclusively employed as the material for vaccination and re-vaccination in the German army. The lymph is obtained solely by calf-to-calf vaccination. The animals are subjected to rigid examination, and every discoverable source of impurity and contamination is carefully eliminated.

This lymph is put up in two forms. First, the pure lymph, which is a product of constant and unvarying activity, obtained directly from the calf. It should be used in a comparatively fresh condition, that is to say, within from four to six weeks after the date of preparation. This is a beautifully limpid fluid, almost as colorless as water, and is inclosed in hermetic-
ally sealed glass tubes. The *emulsified lymph* is prepared from the pure material by a special process. This preparation is a little thicker than the pure lymph, and is slightly turbid. It is equally effective, is far more stable, and retains its power for an indefinite period if the tubes are kept in a cool place. For many years, it is claimed, the results with Dr. Pissen's lymph have been 100 per cent of successes in primary vaccinations, and from 80 to 90 per cent in re-vaccinations. The materials are put up in tubes of different sizes, containing a sufficient quantity for five, ten, or twenty-five vaccinations. 

Both forms of the lymph have been used by Dr. Shoemaker. He says that his success has been uniformly good, and he can report that "the claims made for it are borne out by my own experience. In every case the vaccine lesion was perfectly typical and unattended by any unusual local or constitutional phenomena. These tests exemplify not only the efficiency of the preparation, which is, of course, the chief point to be considered, but also incidentally the preservative influence of the sealed tubes—for the fine lymph, which is the least stable, did not reach me until eight weeks after it had been received by the English agent, and it must have been at least a few days old when it came into his possession. As regards fixity, therefore, it must be regarded as the equal if not superior of lymph dried upon points. The emulsion that I employed was a fresher sample, being about two weeks old. Both varieties were entirely efficient."

The lymph should be applied as follows: "The skin is cleansed with soap and water at the spot selected for the operation, and wiped quite dry. The extremities of the tube are then broken off, and a sufficient quantity of the lymph blown upon the skin, preferably upon four separate places. Then with a blunt lancet or darning needle, previously disinfected by passing through the flame of a spirit-lamp, the lymph is scratched in, care being taken not to abrade the epidermis, any effusion of blood being undesirable. The part should be allowed to dry before the clothing is readjusted, and should not be washed again for a week."

Certain of Dr. Shoemaker's friends, to whom he gave a share of his lymph, have informed him of successes equal to his own. A single point of criticism is raised in respect of the mode of application, but not of the article itself. It is possible that a waste of the fluid may occur in the act of blowing it from the tube; and there may be some want of success in completely re-sealing the tubes, when their contents have not all been utilized.—*Journal American Medical Association*.

**Treatment of Fracture of Clavicle.**—With the exception of the femur, there is no bone fracture with which the surgeon meets where a shortening so uniformly results as in the clavicle. The testimony of surgeons from Hippocrates to the present time, in that, however careful the treatment of this fracture, deformity almost always results. The difficulties do not lie in the reduction of the fracture, for as a rule this is very easily accomplished; the trouble we meet is in retaining the reduction sufficiently long for nature to establish an osseous union; even after the parts are properly adjusted the slightest movement of the head, arm, or even the movements occasioned by respiration are frequently sufficient to displace the fragments again to the position they occupied before their reduction.

I would like to call the attention of the profession to a treatment that has proved successful, that is the use of the bone-dowel or peg. After reducing the fracture in the usual manner, pierce the clavicle with an awl, let it extend from one broken fragment to another, then insert the antiseptic bone-peg completely. The arm and elbow is now suspended in a sling, and the arm is confined to the chest either by a few turns of the bandage or a few broad strips of adhesive plaster.—*Ibid*.

**The Female Asylum Physician.**—In Virginia the proposed legislation requiring that there shall be one female assistant at each of the hospitals for the insane progressed favorably at the last session of the legislature, although it did not pass both houses. The friends of the proposed law are not discouraged. The lower house of the legislature may be considered as committed to the measure; the senate rejected the bill. Some of the ablest of the senators are and will continue to be its advocates. Two years hence the bill will be re-introduced, and thousands of citizens will have discussed the merits of the proposition. The Richmond Dispatch predicts that the next senate will pass the recently rejected bill, or one like it, which will result in "the boards of directors being required by law to have at least one female physician in each asylum, who, under the direction of the superintendent, shall be made to give her attention to the female insane."—*Ibid*.

**Strophanthus in the Treatment of Goitre.**—Dr. S. Yount-Lafayette (La Semaine Médicale, No. 54, 1891) has obtained very good results in goitre from the use of the tincture of strophanthus, administered three times a day in a gradually increasing dose of ten to sixteen drops.
CHOLERA RAMPANT.

The doings of cholera in Europe is just now the most interesting and important event in the medical world. Its ravages in Russia are matters of daily comment in the secular press, and there can be no doubt, refine it as the French casuists may, that it has a foothold in Paris with the probability of spreading all over Europe before frost comes or snow flies.

If we may judge from the history of previous pandemics of the disease, it is not probable that the plague will visit our shores this year; but if the most rigid preventive measures be not successfully taken against its spread, there is reason to believe that it will next year come into gruesome competition with the Columbian Exposition, to the ruin of the project, and the loss to the people of millions in money if not in lives.

In view of these prognostics the Surgeon- General of the United States Marine Hospital Service has issued a circular for the guidance of officers of the service and customs officials, in which he says that "information has been received that cholera prevails in the Caucasus, in eastern European Russia, in Persia, in Calcutta, and on the western littoral of the Red Sea; and in view of the threatened further spread of the disease, and because of the danger which attaches to rags, furs, wool, hides, etc., which may have been gathered in the infected districts, and to articles of personal wear therefrom, it is ordered that no vessel having rags, furs, skins, hair, feathers, boxes, or baled clothing or bedding, or any similar article liable to convey infection, hailing from any port in the districts aforesaid, and no vessel from any port carrying the above mentioned merchandise or immigrants from the present infected districts, or from districts that shall hereafter be officially declared infected, will be allowed to enter any port in the United States unless provided with either a consular certificate or a certificate from a medical officer of the Marine Hospital Service, or State or local quarantine officer of the United States, to the effect that the vessel, cargo, personal effects, etc., have been disinfected. The disinfection of the vessel must be in accordance with the most efficient quarantine practice, and will be by one or more of the following methods: Bichloride of mercury, sulphurous oxide, steam, heat. In addition to the above, thorough cleansing, flushing with sea-water, etc. For the disinfection of the articles of merchandise, personal effects, etc., mentioned in the circular, one or more of the following methods will be used, all articles to be unbaled: (1) Boiling in water not less than one hour. (2) Exposure to steam not less than one hour, the steam to be of a temperature not greater than 115° C. (239° F.), and unmixed with air. All bedding and clothing must be subjected to method No. 1 or No. 2. (3) Exposure not less than six hours to sulphurous acid gas, made by burning not less than three pounds of roll sulphur to each 1,000 cubic feet of space. (4) Exposure not less than six hours to an atmosphere containing three per cent of sulphurous acid gas liberated from its liquid state (liquid sulphur dioxide). (5) Solution of carbolic acid of a two-per-cent strength. This method (No. 5) may be applied only to leather goods, such as trunks, satchels, boots, shoes; to rubber goods, etc., the articles to be saturated with the solution."

If our suggestion were wanted, we would urge our very economical Congress to appropriate the $2,500,000 saved by the Durborow bill to the fortification of our shores against cholera. They might thus save the Exposition from failure and escape some of the opprobrium their recent penuriousness has brought upon them.
Dr. Samum McKee Letcher.

Dr. Samuel McKee Letcher, for years an active, useful, and honored member of this Society, was born in Lexington, Ky., on the 10th day of September, 1841, and closed his earthly career at Richmond, Ky., where he was successfully practicing his profession, on the 4th day of October, 1891.

The physicians of Lexington, where he began his professional career, paid the following tribute to his memory:

"The physicians of Lexington and Fayette County held a meeting at the office of Dr. J. W. Whitney yesterday for the purpose of taking action upon the death of their professional brother, Dr. Sam Letcher. The following committee was appointed to draft suitable resolutions: Drs. L. B. Todd, H. M. Skillman, W. A. Brock, J. L. Stockdell, B. L. Coleman, and R. C. Falconer.

"The committee reported the following, which was unanimously adopted:

"The occasion but seldom occurs when the members of a medical profession of a city assemble to pay a tribute of respectful regard to one who was not an actual resident associate at the time of his death. But it seems peculiarly proper, indeed doubly appropriate, in reference to our late brother, Dr. Samuel M. Letcher, since his honored father was for more than thirty years a capable and useful practitioner of medicine of Lexington, where the son, who bore his name, was born on the 10th day of September, 1841, spent his early life and manhood, and where he first opened an office and began to practice, and where he told the writer, when last he saw him, he designed soon to return to live.

"This profession, to which he seemed fitted by natural gifts and acquirements, seems to have come to him almost as a matter of inheritance as well as a choice. His father was one of five brothers who were all physicians, and who, in different parts of Kentucky, command the highest esteem and confidence of their fellow-citizens, of whom only one survives, Dr. Joseph Perkins Letcher, an octogenarian, who now passes quietly and comfortably the evening of an eventful and useful professional life with his family at Lancaster, Ky.

"Dr. Letcher's death on yesterday at Richmond, where for a few years he has lived, was caused by an accident received a month ago. It put a sad, a tragic and untimely end to a career which at the outset gave promise of brightness and usefulness, and brought sorrow to many friends.

"His early life and manhood, as said, were spent here. He was educated at the Literary Department of Transylvania University. Chiefly under training and guidance of his maternal grandfather, the late distinguished and learned Chief Justice George Robertson. Dr. Letcher acquired and cultivated a taste for reading, principally standard and poetical works. He fortunately possessed a retentive memory, together with a pleasant manner and social disposition, which made him an interesting conversationalist and an agreeable companion.

"Dr. Letcher was graduated from the Kentucky School of Medicine at Louisville, March 15, 1875, a member of the Kentucky State Medical Society, and of that association he was for a number of years the faithful and efficient Recording Secretary.

"With this expression of sorrow at the death of Dr. Letcher and tribute to his memory, the medical profession of Lexington desire hereby to tender sincere sympathy and condolence to his family, and wish a copy of the foregoing to be sent to them by the secretary of this meeting; also to the medical journals of the State, and that the papers of Richmond and Lexington be requested to copy them, and that, as a further evidence of our respect, we attend his funeral.

"J. W. Whitney,
"Chairman.

"M. T. Scott,
"Secretary.

The sketch of Dr. Letcher's life would be incomplete without reference to his military career, which was phenomenally successful as it was brilliant and heroic. He entered the service as a private; his promotions were rapid, and on more than one occasion for bravery and efficiency he was promoted upon the field of battle.

The following extracts from his commissions
and reports from commanding officers to the War Department; will be read by the friends of Dr. Letterer with interest and admiration, forming as it does an important and brilliant chapter in the biographical history of the War of the Rebellion.

Samuel McKee Letterer enlisted in Captain James Dudley's Company E, Twenty-first Regiment Infantry Volunteers of the State of Kentucky, at the age of nineteen, at Lexington, Ky., on the 21st day of October, 1861. In the spring of 1862 his regiment marched from Lebanon, Ky., being a portion of General G. H. Thomas' corps, to Logan's Cross-roads (now Mill Springs, Ky.), where the battle with General Zollicoffer's forces took place; General Thomas' staff not being sufficient, he was detailed as aid. On the battle-field General Thomas asks for his promotion as a second lieutenant in the following language:

I have the honor to recommend to the Secretary of War, Samuel McKee Letterer, of the Twenty-first Kentucky Volunteers, for second lieutenant in the U.S. Army for meritorious services. He was near the whole day, and conducted himself with great courage, coolness, and bravery.

After this promotion came rapidly; he was appointed Captain of the same regiment June 15, 1862; Major, November 1, 1863; Lieutenant Colonel, March 20, 1864, and Colonel, March 20, 1865.

President Andrew Johnson requested the United States Senate to confirm his appointment as colonel for energetic, faithful, and meritorious services in the Army of the Ohio and Department of North Carolina. He also took an active part in the battles before Nashville, in the siege of Knoxville, Lookout Mountain, Missionary Ridge, and Shiloh; marched with General Buell's army from Corinth, Miss., to Kentucky; was in the battle of Perryville. From there he marched back to Tennessee, was appointed commissary of musters for the Army of the Ohio, and made the march with Sherman's army to the sea, and at the close of the war mustered out Sherman's army in North Carolina and Southern Virginia.

This gallant and honored soldier in his private life was as gentle, amiable, and loving as a woman and unfaltering in his friendship.

LYMAN BEECHER T.ODD, M. D.

LEXINGTON, KY.

Notes and Queries.

CHOLERA.—The English medical journals of July 9th are at hand with further details of the epidemic of so-called cholerine in the suburbs of Paris; the information emanating from French sources is meager and not very satisfactory. From April 5th up to July 25th, one hundred and fifty-nine deaths from a rapidly fatal diarrheal affection had been reported in the neighborhood of Paris, and the character of the disease, although attributed to the use of Seine water and manifesting itself in those quarters where the water is supplied for consumption, is evidently regarded with some suspicion across the channel. The Lancet's special correspondent states that a municipal commission was appointed to investigate and report upon the epidemic. An investigation was made, which included a careful examination of the defecations of patients, and a report drawn up by Dr. Prout was rendered, but it had not been published. In other words, it had been suppressed by order of the Prefect of the Seine, after having been submitted to and adopted by the Consultative Council of Hygiene at a meeting held at the Ministry of the Interior. This, in itself, is calculated to increase alarm and uneasiness, especially as it is understood that a bacillus resembling that of true cholera was found.

The position of the Paris water-supply is described as follows: "In ordinary times 135,000 cubic meters of water are consumed in the day; but when the temperature rises to about 70° F., there is an increased consumption of water equal to 30,000 to 40,000 cubic meters more. The water-works are then obliged to make up the difference by giving Seine water. Nor is it practical to purify efficaciously so great a volume of water. No sterilizing apparatus could deal with such a quantity. Moreover, it is not possible to ration the supply, for while the supply was stopped the pipes would get filled with air, and this is attended with many inconveniences and dangers; and, on the other hand, there would be no water to flush the closets. The best hope of the Parisians rests on the fact that eighty-seven kilometers out of the one hundred and two kilometers of the aqueduct, which will bring the water of the Vigne to
Paris, are now constructed. Perhaps this additional supply of pure water will be available next summer; in the meanwhile the inhabitants are asked to carefully boil their water and to wait patiently. As a temporary measure it has been decided to apply the Pasteur filter to the Wallace drinking fountains, so that prudent persons may go to these fountains and fetch their supply of drinking-water. But the number of prudent and thoughtful persons is very limited, so the epidemic continues. Also the waters of the Vigne will only reinforce the Paris supply; the suburbs, where the epidemic most generally prevails, will continue to drink the Seine water.

Concurrently with this increased distribution of Seine water during the recent hot weather which prevailed in Paris, and with the development of this epidemic of "cholerine," typhoid fever has been rapidly increasing, so that on June 30th two hundred and thirty-five cases were said to be under treatment in the Paris hospitals.

Notwithstanding these additional details, we see no reason to change the position which we took in our last issue so far as Paris is concerned. We do not think that true Asiatic cholera has established itself there as yet.

On the other hand, there can be no doubt that it is spreading with some rapidity in southeastern and central Russia, and that contiguous countries of western Europe are impressed with the possible gravity of the situation. Should reports that cholera has appeared at Odessa and other ports on the Black Sea be substantiated, it will indicate a not distant farther western march of the epidemic.

Certainly, the situation is such as not only to justify but to demand the utmost vigilance on the part of the quarantine and health officers of our seaport cities. It is not reassuring to learn that cases of typhus fever have again been allowed to land in the city of New York. The large immigration of Russian and Polish Jews is a constant source of danger at that port.—Boston Medical and Surgical Journal.

To Welcome Visiting Doctors to the Columbian Exposition.—Charles Truax, Greene & Co., dealers in physicians' supplies, have announced their intention of looking after the wants of visiting doctors from all quarters of the globe. The firm has spacious quarters for the work. It will be undertaken at great expense to the firm and without cost to the visiting physicians or the World's Fair management.

A Physicians' Bureau of Service and Information to be open to the physicians and surgeons of the world. Believing we can be of service to every practitioner of medicine who may attend the great Columbian Exposition to be held in this city in 1893, we shall establish and maintain during the entire session a bureau of service and information for the exclusive use and benefit of all visiting physicians and surgeons and their wives. Ample room will be provided for the successful operation of each department and additional space set aside for the use of the secretaries and other officers of medical societies and conventions.

No charge will be made for the services here offered, and all who are legitimately engaged in the practice of medicine or surgery will be made welcome.

The services offered are as follows:

1. Registration: By registering with us your name, college, and date of graduation, residence when at home and hotel and boarding-house while in the city, telegrams and mail matter can be promptly forwarded and correct addresses furnished to all inquiring.

2. Hotels and Boarding-houses: A list of leading hotels and boarding-houses will be kept, with location, description, and rates. Reliable messengers can be procured at small expense to assist strangers in securing satisfactory accommodations.

3. Telegrams: For these we will receipt if requested, or assist (by means of our register) in their speedy delivery.

4. Postal Benefits: A miniature postoffice will be established so that mail matter may be addressed to our care.

5. Banking Facilities: Cash will be paid out during banking hours from currency deposited with us and from funds forwarded us direct from banks. Moneys sent us by banks for credit should be accompanied by signature of depositor. Checks and drafts will not be
cashed, and will be received only for collection.

6. Telegraph, Telephone, District Messenger, Livery, Cab, Express, Baggage, and Freight Service, arranged in the building and legitimate rates secured.

7. Check and Cloak Room Parcels and small packages will be received and checks issued for the same.

8. Headquarters for Physicians: A reading and reception room, with writing facilities and stationery, will be provided where physicians may meet their friends, attend to correspondence, etc.

9. Purchasing Department: Theater, exposition, sleeping-car, and railway tickets will be secured, and assistance rendered in purchasing goods in all lines of trade.

10. Office-room and Desks: In or adjoining the general headquarters will be provided for the secretaries and other officers of medical societies and conventions.

11. Interpreters: German, French, Spanish, and other interpreters will be permanently located in the building.

These privileges will be granted to physicians and surgeons (and their wives) only—college and date of graduation required on registration.

Before leaving for Chicago, the physician or surgeon who wishes to avail himself of these privileges, should instruct his bank to forward us any moneys he may desire to draw through us while in our city, and leave order for all mail and telegrams to be forwarded in our care.

On arriving at the depot in this city, if he will take a cab direct to our office we will render him every assistance in our power, placing him in possession of all information regarding the city, at our command.

This service, being a portion of our contribution toward making the World's Columbian Exposition the most enjoyable and instructive show the world has ever witnessed, is freely offered to physicians and surgeons with the hope of benefiting the medical profession, securing a larger attendance at the Fair, and further extending the hospitable reputation of our city.

Charles Thwaites, Greene & Co.,
Chicago, 75, 77 Wabash Avenue.

The American Health Resort Association.—This Association met at the Tremont House, Chicago, June 30th, and held three sessions.

There were present delegates representing Canada, Michigan, Massachusetts, Wisconsin, Florida, New Hampshire, New York, Pennsylvania, California, Illinois, Vermont, Colorado, Texas, Iowa, New Mexico and Central America.

A large correspondence was read by W. A. Chatterton, Secretary, from the absent members in the various parts of the country.

The President, T. C. Duncan, M. D., of Chicago, then delivered a lengthy address, in which he outlined the good work of the Association, and how it was appreciated by the profession, enabling them to select climates adapted for the various cases of consumption. From reports received from the winter points, New Mexico had proven the most satisfactory. This is of interest to the profession who are trying to save some of the "hundred thousand consumptives" who die annually in this country.

Dr. J. F. Danter, of Toronto, Canada, read a paper on the Climates and Resorts of British America.

A report on the climate of Manitoba was read from Dr. Clark, of Winnipeg.

The climate of New Brunswick was presented by Dr. J. Z. Currie.

From these reports it seems that there are a large number of consumptives in Canada, especially in the eastern provinces.

Dr. Adam Miller read a paper on Sun Spots and Magnetic Influence in Disease.

The climate of Nebraska was presented by Dr. Brown.

The climate of California and its Resorts was presented in papers by Drs. J. D. Hartley and W. S. Andrews, of Chicago.

Dr. W. P. Roberts, of Boston, read a report on the climate of New England, in which he reported that 15,000 die annually there from consumption.

Consumption in Michigan was the subject of a paper by Dr. Veenboer.

Dr. O. W. Gordon, of Council Bluffs, reported his disappointment in visiting various resorts, and spoke highly of New Mexico.
A report from Dr. A. Petin, of Las Cruces, New Mexico, formerly of Paris, was read, in which he said they had almost constant sunshine, less than two inches of precipitation in twenty-eight months, and that consumptives sent there were all doing well.

A report on the Adirondack region was read from Dr. Skinner.

Dr. B. W. James, of Philadelphia, contributed a paper on Climate Maxims.

The climate of Costa Rica was presented by Dr. Buchanan.

Dr. S. A. Butler reported on the climate of Honduras.

Texas as a Resort for Consumptives, was the title of a paper by Dr. Marshall.

Reports on mineral waters were presented from Las Vegas Hot Springs, New Mexico, Eureka Springs, Ojo Caliente Hot Springs, New Mexico, Costa Rica, and Londonderry.

Prof. I. N. Danforth gave an address on Mineral Waters, their Analyses and Uses.

He said the profession was being imposed upon by imperfect and fraudulent analyses. In the first stage of Bright's disease he thought that bland water should be used, and in the second Lithia waters.

Prof. W. S. Haines made a valuable report on Bacteria in Mineral and Potable Waters. In some mineral waters he found 2 bacteria to the cubic centimeter, and in some drinking-water he found as high as 8,000.

A large number of members were admitted.

It was reported that a Congress of Climatologists would meet in Chicago next year, and it was voted that the Association meet with it.

The following officers were elected: T. C. Duncan, M. D., President, Chicago; J. F. Danter, M. D., First Vice-President, Toronto, Canada; I. N. Danforth, M. D., Second Vice-President, Chicago; W. P. Roberts, M. D., Third Vice-President, Boston, Mass.; T. S. Hoyne, M. D., Treasurer, Chicago; W. A. Chatterton, Recording Secretary, Chicago; J. D. Hartley, M. D., Corresponding Secretary, Chicago; W. W. Van Baun, M. D., Philadelphia; Prof. W. S. Haines, M. D., Chicago.

Why Must We Sleep? —This is a question that has long waited an answer. Dr. Rosenbaum, with Germanic thoroughness, quotes the views of philosophers from Alkmaon, who lived 2,500 years ago, down to Dr. Preyer, who seems to be the latest authority on the nature of sleep. Most of these opinions are guesses, pretty wide of the mark, and it is only within a few years that we have arrived at any real additions to our knowledge on the physiology of sleep. A state of intermittent repose is probably common to all organized beings. The acacia, which folds its primate leaves at sunset, may be said to sleep. This condition is, of course, more distinct in animals which possess a nervous system. Sleep seems to involve, to a certain extent, the spinal cord as well as the brain. Goltz succeeded in removing almost the whole cerebrum of a dog, and keeping it alive for fifty-one days. He found that, in this animal, alternations of rest and unrest succeeded one another; before the time of feeding the dog was restless, when fed he became quiet and fell asleep. He could be waked by touching any part of his body. Dr. Rosenbaum tells us that pigeons deprived of their hemispheres appear to fall asleep periodically. It was long a subject of discussion whether, during sleep, there was more or less blood in the brain than in the waking condition; but it is now generally admitted that during sleep a portion of the blood deserts the brain, being probably replaced by the arachnoid fluid. In cases in which a portion of the skull has been removed, or in the trephined animal, the brain is observed to sink during sleep.

Congestion of the brain carried to a certain degree causes stupor; but what distinguishes stupor from ordinary sleep is the lightness with which the individual passes from the somnolent into the waking state. We can not get rid of the effect of cerebral congestion, or rouse ourselves when under the effects of a narcotic; but we drop asleep in a moment, and a touch or a word in the ear can at once recall us from the realm of Morpheus to that of waking reality. What is the nature of this mysterious change which daily affects us, and which we have ceased to wonder at, because the riddle has so often baffled us? To dispel our igno-
rance, Dr. Emanuel Rosenbaum presents us with a new theory. He observes that all organized tissues in active function have alternations of energy and rest. The heart, which keeps beating while life lasts, has its pauses, during which it repairs its waste. Vital action does not run on till its materials are exhausted; but there comes a period when it stops to renew its power, and then it begins again. Dr. Rosenbaum observes that the brain remains in function during the waking state, and repairs its losses during sleep. Sleep is owing to the used-up material in the nerve tissues being replaced by watery fluid. The greater the watery contents in the nerve tissues the less is the irritability, until there is absolute loss of function. This increase of watery contents follows the chemical changes of nerve substance, which takes place during and after nervous activity. This water, which replaces the nerve substance, is expired through the lungs in the form of aqueous vapor principally during sleep. The absorption of the water into the venous current happens according to the laws of diffusion, and is dependent upon the volume and thickness of the blood, its relation to the solids, and the rapidity of the circulation. The giving off of these vapors through the lungs is dependent upon the laws of diffusion of gases, the pressure of the air, and the amount of water it already contains. Dreaming and sleep-walking are dependent upon the unequal quantity of watery fluid in different parts of the brain.

Dr. Rosenbaum seeks confirmation of his views by the observation that people are more disposed to sleep when the air is saturated with moisture, and that children who sleep a great deal have more water in the tissues of the brain. He cites the observations of Schiff and Harless that the excitability of nerves is diminished by an increased absorption of water into their substance, and seeks to show that in the diseases in which there is a marked tendency to lethargy or coma the nervous substance becomes softer and more watery in consistence.

Here it may be observed that loss of function might be expected to follow the replacement of the normal material by any other element, whether fluid or solid, and that in fact we have a tendency to sleep or increasing stupor with hardening of the brain when the fluid which replaces shrinkage is deposited under the membranes on the outside of the nervous substance.

Dr. Rosenbaum's theory does not help us to explain hypnotic sleep or hibernation, and, in spite of his labored arguments about the nature of the changes and decompositions in the organism, his theory lacks proof. Dr. Rosenbaum even ventures to answer the celebrated question of Molière, Why opium causes sleep? It is because it acts upon the respiratory centers and thus diminishes the number and depth of the respirations. This causes edema of the brain and increase of its watery contents. We may then ask, Why opium acts upon the respiratory centers? and unless Dr. Rosenbaum can answer this he will have to fall back upon the famous "explanation": "Quia est in eo virtus dormitiva cuius est natura sensus assonire."

After all, science can scarcely explain the why of any thing. It merely points out the order in which natural processes occur. Prayer holds that sleep is caused by the products of decomposition, lactic acid, and creatin taking up the oxygen in the blood. The functions of the gray matter of the cortex can not be exercised without a plenteous supply of arterial blood any more than the zinc and copper of a voltaic pile will evolve electricity without the sulphuric acid. Thus the blood conveys a stimulus or imparts a capacity to the nerve tissues during waking, while during sleep it has a separate and distinct function—that of repairing waste. Apparently these two processes can not go on in the brain at once, or at least only to a degree too limited to prevent a speedy exhaustion of the vital powers if sleep be withheld. There is a striking disparity in the time required for sleep by different persons. Some men, like the Emperor Akbar, St. Francis Xavier, and General Eliot, the defender of Gibraltar, could do with as little as four hours' sleep, while other men need ten hours or even half the twenty-four. But all must sleep. A cruel form of capital punishment in China consists in artificially keeping the culprit awake till he dies from exhaustion. 

*British Medical Journal.*
Cholera in Paris.—Each summer Paris has its rumors of cholera epidemics in its midst. Day by day for some time past accounts have appeared in the papers detailing the death of an individual or of individuals with symptoms pointing to the existence of cholera. So many and so various are the rumors and statements which appear with reference to the matter that it is extremely difficult to get at the real truth. Ever since the commencement of April, in the suburbs of Paris, and also in Paris itself, cases said to be cholera have occurred; and during the last few days M. Charles Talamon, physician to the hospitals of Paris, has publicly stated that in many of its aspects this year’s outbreak up to the present has been rather more grave than its predecessors. The asylum at Nanterre contains some 4,000 old men afflicted for the most part with various chronic diseases. They thus afford an easy prey to any epidemic that may attack them. At this place there were, in fifteen days, 51 cases of choleraic diarrhea, of which 48 proved fatal. Some light may possibly be thrown on the cause of this outbreak when it is stated that at the asylum the water of the Seine was in use. In previous years this has frequently, in fact almost always, been found to produce diarrhea and dysentery, in many cases very severe. The outbreak occurred very suddenly, and at once measures were taken against it, with the result that it disappeared as rapidly as it had broken out. The epidemic was doubtless rendered exceptionally severe by the hot weather in the early days of April, when the thermometer was at 86° F. About this time attacks of diarrhea, attended choleraic symptoms, were reported from the suburbs of Paris, from Puteaux, Courbevoie, St. Denis, Aubervilliers, and Poissy. The cases have, however, all been of an isolated character, and they have been occurring at intervals since April, and are still continuing to occur. Indeed, during the last week, at least two, if not more, deaths have been noted at St. Denis. In some of the cases which have been taken to hospitals the symptoms have been the same as those observed in some of the victims of the Nanterre epidemic. Prof. Peter states that in the case of a man, aged forty-nine, who died after an attack of twelve hours’ duration, the symptoms were those of cholera—excessive diarrhea, stools watery and whitish, with violent cramps in the legs and general chill. The post-mortem examination revealed the conditions found in cholera and cholera nostras. In times of epidemic such a case would have been judged as being one of real cholera. There is not in Paris at the present time a real epidemic of cholera, but there have been some isolated cases, as is often the case at this time of the year, when bad water and the excessive heat tend to produce intestinal disorders, and further cases are at the present time occurring both with excessive diarrhea and with choleraic symptoms more or less pronounced.

The Cause of Death in Chloroform Narcosis.—An anonymous letter writer in a contemporary, whose modesty only permits him to term himself a “A Practical Anesthetist,” quotes fourteen cases of death under chloroform occurring since the commencement of the year, and draws certain conclusions. It is a pity the list is not more complete, and that the practical anesthetist did not obtain the fuller particulars of these cases, as several of them were pretty thoroughly reported, although not in the papers from which he quotes. The gentleman in question quotes the well-known case of the death under Pictet’s purified chloroform as evidence that even chemically pure chloroform kills, and he considers too much importance may be attached to the consideration of the impurities in the drug. In the table quoted thirteen administrations are said to have been made “in the usual way,” a phrase which seems a veiled saying, although to the practical anesthetist it means “the most unscientific and uncertain way in which such a powerful toxic agent as chloroform can be administered.” From reading the fuller accounts of the cases quoted, we believe “the usual way” represents giving chloroform on lint held some little distance from the patient’s face, a method which, if properly carried out, insures a full dilution of the vapor, as was shown by the classical experiments of Sir Joseph Lister, published in his article on Anesthetics in Holmes’s System of Surgery. That very many deaths under
chloroform are due to overdoses we fear must be admitted, but it is certain that all deaths are not due to this cause. In by far the larger number of the cases quoted the death is referred by the administrators to sudden heart failure, and not to respiratory difficulty, and we have yet to learn whether there is any way by which such casualties are to be absolutely prevented. Forty thousand cases without a death is a good record, but of course forty thousand cases is a very small number when we remember the enormous number of chloroformizations which are carried out daily in London, to say nothing of the larger towns of the United Kingdom. Were such figures obtainable, it would probably be found that even the number of deaths which occur, many of which, it is believed, are never reported, would be a very small fractional percentage of the number of times the drug is given. We shall probably hear more upon the this subject when the Committee of the British Medical Association on Anesthetics is able to present its report. Meanwhile we can only hope that all "practical anesthetists" will find and remove the motes out of their own eyes, as well as search for the beams in the eyes of less gifted practitioners, who nevertheless are compelled to undertake the onerous responsibility of giving anesthetics to suffering humanity.—The British Med. Journal.

The sixteenth annual meeting of the American Dermatological Association will be held at the Pequot House, New London, Connecticut, September 13, 14, and 15, 1892. Officers for 1892: President, E. B. Bronson, M. D., of New York; Vice-President, F. J. Shepherd, M. D., of Montreal, Canada; Secretary and Treasurer, G. T. Jackson, M. D., of New York; Council, E. B. Bronson, M. D., G. H. Fox, M. D., F. B. Greenough, M. D., G. T. Jackson, M. D., F. J. Shepherd, M. D.

Smallpox.—On account of the prevalence of smallpox in various places upon the Ohio River and Great Lakes, the Surgeon-General of the Marine Hospital Service has given orders to the surgeons of the service in these districts to visit vessels and vaccinate the crews, and in other ways to promote vaccination.

Prevention of Typhoid Fever.—The following circular has been issued by the State Board of Health of Kentucky to the health officials and people of Kentucky: This Board desires to call the earnest attention of our health authorities and people to the gradually increasing prevalence of and mortality from typhoid fever, and to the growing importance of a constant resort to the methods which modern scientific researches have suggested for the prevention of this disease.

These preventive measures are of the more importance to the State because directed against a disease especially prevalent and fatal among persons in the prime of life, who contribute most to the public wealth and prosperity. Considered purely as an economic problem, the feature of it probably least thought of by most people, the importance of this disease can scarcely be overestimated. Statistics show that ten persons are sick for every one that dies of this disease, and to say nothing of the cash value to the State of those who die every year, and it is conceded that the State has no more valuable property than that represented in its vigorous population, the loss of time and labor, and the necessary cost incurred in attention to those who finally recover, makes an annual tax upon our people of startling proportions.

Typhoid fever is probably the most preventable of all diseases, not even excepting smallpox. It is now known that, like cholera and dysentery, the germ or specific cause of this disease is contained in the discharges from the bowels of those sick of it, and that while other methods of introducing the poison into the system are possible, it most generally gains entrance through the medium of an infected water supply—usually the use of well-water polluted by fecal matter. This may be direct from drinking such water, or indirect, as by using milk or other articles of food or drink from cans or vessels washed in it. Ice from an infected source is also dangerous, since it has been proven that freezing does not destroy the infective principle.

While water from all sources of supply is liable to contamination, well-water is especially so, whether located in city, town, summer
watering-places, or country. Thus, out of three hundred and fourteen cases occurring in Louisville in 1884, two hundred and ninety-eight of the persons used well-water habitually, and some of the other sixteen did so occasionally. In the now famous epidemic at Plymouth, Pennsylvania, involving the sickness of 1,104 persons, the death of 114, and an actual outlay in money of $67,100.17, the outbreak was traced to the use of water polluted by the fecal discharge of one imported case of the disease. Facts no less convincing might be multiplied indefinitely if space permitted. In a smaller way they are common in the experience of most physicians in active practice.

Usually the wells are sunk near the kitchen, and in dangerous proximity to the privy and other sources of contamination. The well draws its supply from an inverted cone, having its apex at the bottom of the well and its base at the surface of the ground. In dry seasons this base is often extended until the well becomes a receptacle for the more or less perfectly filtered filth from all the sources found in the average back yard, and the water, often sparkling in its apparent purity, becomes a culture fluid for any disease germs finding their way into it.

Two methods of prevention having the same general object in view are recommended. The first involves the thorough disinfection of all discharges from the bowels of typhoid-fever patients. This is best done by the use of a solution of chloride of lime, eight ounces to the gallon of water, using a quart of this solution for each discharge, and allowing it to stand in the vessel at least one hour before emptying. A solution of corrosive sublimate, two drams to the gallon of water, will answer the same purpose, but requires to remain longer in contact with the material to be disinfected. Bed and body linen soiled by such patients should be disinfected by the use of the same solution, or by boiling.

The second method relates to avoiding the use of suspicious water, and especially well-water contaminated as above indicated, and where this can not be done, to boil such water before it is used for drinking purposes. In the absence of a pure and well-guarded public water supply, properly stored cistern water is probably open to least objection.

The effectual practice of these methods will require intelligent care and some expense, but it is confidently believed that their general adoption would result in the practical disappearance of a disease which is not only a disgrace to our civilization, but an annual scourge and tax upon the people of Kentucky, in comparison with which yellow fever and cholera sink into insignificance.

Copies of this circular, for free distribution, may be had upon application to the Board at Bowling Green, Kentucky. By order of the Board.

PINCKNEY THOMSON, M. D.,
J. N. M'CORMACK, M. D., Secretary.

DEATHS IN KENTUCKY, 1891.

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This diagram is accurately drawn to a scale, and the relative importance of the preventable diseases as causes of deaths in Kentucky is therefore correctly shown.

The Gold-Cure Abroad.—The Lancet publishes and discusses seriously and sadly the following item of information:

"The gold treatment for alcoholism and the morphine habit, which has been so largely advertised in America, is now about to be introduced into this country. To-day (Friday) a meeting is to be held at the Westminster Town Hall, under the auspices of the Church of England Temperance Society, and the chairmanship of the Right Rev. Bishop Barry, at which information will be given respecting this treatment and its results in sixty thousand cases. We hope that this information will go further than a mere reference to so many alleged cures. The drug used by Dr. Keeley is stated to be a double chloride of gold, but beyond this nothing is known. The formula, method of use, and dosage are kept quite secret. For
twelve years Dr. Keeley is reported as having pursued this treatment at Dwight, Ill., and in that time sixty thousand persons are said to have been treated at the parent home, and at the branches established in various American States, with only five per cent of relapses."

"Truly," our contemporary adds, "the methods adopted by some American physicians astonish us. The running of a secret cure for one's personal profit would, in this country, insure the erasure of the inventor's name from the roll of any college of physicians or surgeons, university or medical society, with which he might be connected."

If The Lancet would take the trouble to glance over current American Medical literature it would learn that Dr. Keeley, if he is a doctor, does not hold any position on the roll of any reputable medical society or institution of learning. It would learn also that the gold-cure, so-called, is generally regarded by the profession in this country as a purely commercial enterprise, and a form of arrant charlatanry. The claims for the cure are absurd and unsubstantiated, while, whatever be its merits, its secrecy and the purely business methods by which it is worked have condemned it long ago. It will run its course like the Perkins tractors and mind-cure.—Medical Record.

The Next Annual Meeting of the American Public Health Association.—The American Public Health Association has issued a preliminary announcement of its next annual meeting, which will be the twentieth, and will be held in the City of Mexico, November 29th, 30th, and December 1st and 2d.

Members and representatives from all parts of the United States, from Canada, and from every Mexican State are expected to be present. There will also be representatives of the Central and South American republics. The Mexican Government has interested itself in the meeting, and the details of the arrangements are in the hands of the federal officials.

The local committee announce that the city government will entertain the Association one evening; a local society another evening; one day following the meeting an excursion will be made to observe the great work, now nearly completed, for the drainage of the Valley of Mexico; and another day will be devoted to an excursion for sight-seeing in and about the City of Mexico.

President Diaz will give a reception to the Association at the famous castle of Chapultpec.

A committee of American ladies, resident in the City of Mexico, has been organized for the purpose of entertaining all the ladies who may attend from the United States and Canada.

Dr. Eduardo Liceaga, of the City of Mexico, is chairman of the local committee of arrangements.

This should be a very instructive, interesting and enjoyable occasion.—Boston Medical and Surgical Journal.

Lesbian Love and Murder.—A young girl, living in Tennessee, formed Lesbian relations with another girl. The latter slackened in her devotion to perverted sexuality, and accepted attentions from a young man. The young woman of the first part thereupon became jealous, and in a fit of passion killed her girl lover, declaring that she could not live without her love. The trial for murder begins, and the claim of insanity is put in defense. The victims of sexual perversion may be in a sense insane, but we very much doubt if the law will hold them irresponsible.—Medical Record.

Officers of Tennessee State Medical Society.—During the session of this State Society, held in Knoxville, the following officers were elected for the ensuing term: Dr. C. W. Beaumont, of Clarksville, President; Drs. A. D. Struggs, W. K. Sheddan, of Williamsport, and W. A. D. Coop, of Dyersburg, Vice-Presidents, respectively for, East, Middle, and West Tennessee; Dr. D. S. Nelson, of Chattanooga, Secretary, and Dr. Walker, Treasurer.

At the annual meeting of the Washington, D. C., Medical Association, the following officers were elected: N. S. Lincoln, President; C. H. A. Kleinschmidt, First Vice-President; H. L. E. Johnson, Second Vice-President. James Dudley was re-elected Secretary, and Samuel S. Adams, Treasurer.
The Cholera continues to advance in South-eastern Europe. In Russia the disease appears to be ascending the Volga, and now has passed Saratov, several cases being reported from Kazan. It is said also that cholera has appeared in Moscow. A number of deaths occurred on a steamer plying the Volga between Astrakhan and Kazan, and in three days there were seventeen deaths of passengers on the trans-caucusas railway. Russia has extended her influence and commerce in Central Asia through this railroad, but is now paying the penalty, as it is by means of this same highway that the cholera has been brought into Eastern Europe.

A serious riot took place in Astrakhan, a number of peasants having attacked the hospital under the impression that the physicians were burying their patients alive. The Minister of War has, in consequence, sent word to the commandants of garrisons to repress any similar outbreaks without delay, using ball cartridges if necessary. A death has occurred in Trieste from what is believed to have been cholera, and several suspicious cases are reported from a village in Roumania near the Servian border. A commission of experts, sent by the Spanish Government to Paris to report on the "cholerine," has declared that the disease is true Asiatic cholera. In consequence of this report Spain has instituted a system of inspection along the frontier, and arrangements are being made for the thorough disinfection of the baggage of passengers entering the country from France.—Medical Record.

Europhen in Syphilitic Affections.—Dr. Gaudin (Journal des Maladies Cutanees Syphilitiques, No. 1892) had made experiments at the Polyclinic of Paris with injections of europhen on syphilitic patients in various stages of the disease, and arrives at the following conclusions: The injections are well borne, although at times somewhat painful. They are never followed by general or local disturbances, but always by an improvement of the syphilitic phenomena. The results were slight in the secondary stage, but always good in tertiary syphilis, especially when the injections were made in the vicinity of the disease. In all of the cases the injections seemed to act as rapidly and efficiently as oleum cinerum or corrosive sublimate. They may therefore be recommended whenever it is desirable to treat rapidly and energetically severe syphilitic phenomena. Gaudin justifies these conclusions on the ground of fifteen cases observed by him. In the sixteenth case of chancroid in the sulcus and in the inner surface of the prepuce, europhen was applied three times daily to the sore, without resort to other medication. In eight or ten days the ulcer had completely cicatrized.

Typhus Fever in New York.—The quarantine officer at New York reported that, on July 14th, a case of typhus fever was found on the Guion steamer Nevada. The patient was a Russian from the province of Wilna. The vessel had on board ninety-one immigrants from Russia, who were detained on board, and about two hundred steerage passengers from other places were allowed to land. The next day two more cases were discovered among the detained Russians, all of whom were then sent to the quarantine island for further observation. The clothing and steerage in the vessel were fumigated by steam, and the three patients removed to the Reception Hospital. During the voyage the Russians had been isolated from the other immigrants, and it is not apprehended that there will be any spread of the disease in the city, as was the case with the Massilia typhus outbreak. The steamer Taormina, also, of the Fabre line, which arrived on Sunday, had one case of typhus and one of smallpox on board. All of the passengers are detained at quarantine. A death from typhus is reported at Yonkers.—Boston Medical and Surgical Journal.

Condemnation of Secret Cures for Inebriety.—The last quarterly meeting of the English Society for the Study of Inebriety discussed the Keeley bichloride of gold cure, and before adjournment passed unanimously the following motions:

1. "That this meeting of the Society for the Study of Inebriety (of which the members are registered British medical practitioners) is of opinion that any so-called 'cures' for ine-
briety, the composition of which is not disclosed, are unfit to be commended by honorable members of the medical profession, who are bound to place the full details of their treatment before their professional colleagues, a requirement as essential in the interest of the public as it is consonant with the disinterested practice of scientific therapeutics.

2. "That this meeting, having been informed by a competent London analyst, who has made a special analysis, that the alleged 'bichloride of gold cure' shows no trace of gold or of chlorides, and contains 27.55 per cent of alcohol, condemns unreservedly the prescription of such an intoxicating preparation to an inebriate."

**THE PROFESSION IN GERMANY.—**From statistics furnished by our German correspondent it appears that the number of medical men in Germany registered for the year 1891 was 20,223, against 18,840 in 1890, making an increase of 1,383 for the year. This number is distributed thus: Prussia, 11,129, against 10,754 in 1890, increase 345. In Berlin alone there are 1,615 this year, against 1,412 in 1890, increase 203. In Bavaria 2,219 practice medicine, and 2,346 surgery. Saxony has 2,616; Württemberg, 690 doctors and 305 surgeons; Baden, 608 practitioners; Hesse, 467; Mecklenburg-Schwerin, 225; Hamburg, 376; Alsace and Lorraine, 577. The increase thus appears to be generally diffused.—*Medical Press.*

**ONTARIO MEDICAL JOURNAL.—**The first issue of this journal will appear about the 15th of August. It is the organ of the College of Physicians and Surgeons of Ontario, and is supplied by order of Council to every medical practitioner in Ontario free. It is to appear under the editorial management of R. B. Orr, M. D., of Toronto, Ontario.

**YALE MEDICAL DEPARTMENT.—**The seventy-eighth anniversary of the Medical Department of Yale University was held on June 28th. The address in medicine was delivered by Geo. M. Sternberg, M. D., of the United States Army. Twenty-two graduates received the degree of M. D.

**AMERICAN PEDIATRIC ASSOCIATION.—**Officers elected for the ensuing year: President, Dr. Blockader, of Montreal; First Vice-President, Dr. Keating; Second Vice-President, Dr. Earle, of Chicago; Secretary, Dr. Samuel Adams, of Washington; Treasurer, Dr. Townsend, of Boston; Recorder, Dr. Watson, of New Jersey; New Member of Council, Dr. Roteh, of Boston. New members elected were: Dr. P. Crozer Griffith, of Philadelphia, and Dr. T. F. Sherman, of Boston.

**CHOLERA RIOTS IN RUSSIA.—**The ignorant population of Astrakhan, believing that the sanitary measures taken to prevent the spread of cholera were unnecessary, that the sick were put in the hospitals without cause, and that many were buried alive, set fire to the hospitals, after removing the sick, and then attacked the governor's house, when they were checked by a military detachment.

**SPECIAL NOTICES.**

The following formulae produce slightly pharmaceutical products of ascertained value in practice:

**CHRONIC RHINITIS.—**In the remedial treatment the following has proven of service, used with the atomizer twice or thrice daily. If used with a douche, dilute with two or three parts water. **Note:** The iodine is decolorized in preparation, a clear solution of light amber color resulting:

- R. Sodii boricae.............. 5 ss; Sodii lithii.............. 2 ii; Aq. pura.............. 2 ii
- Dissolve and add: Acid carbolic.................. grs. xv; Tr. iodi.................. 3 iii; Listerine, q. s. fl.................. 3 vi. M.

**PRURITUS ANI AND VULVA.—**The following formula will afford relief from the itching and irritation, to be applied locally:

- R. Sodii hyposulphe.................. 5 i; Acid carbolic.................. 2 ii; Glycerina.................. 2 ii; Listerine.................. 2 iii. M.

**PRURITUS.—**Another formula which has proven signally useful in some cases is:

- R. Sodii salicylate.................. 5 ii; Glycerina.................. 2 ii; Listerine.................. 5 vii. M.

The Phosphates of Iron, Soda, Lime, and Potash, dissolved in an excess of Phosphoric Acid, is a valuable combination to prescribe in Nervous Exhausiton, General Debility, etc. Robinson's Phosphoric Elixir is an elegant solution of these chemicals. (See this journal.)
Original Articles.

PREVENTIVE MEDICINE RESPECTING CONSTIPATION.*

BY LYMAN BEECHER TODD, M. D.

Desiring that we keep abreast with this utilitarian age in which we live, when *cui bono* is the watchword of the hour, I purpose to consider a subject which constantly engages your attention; which severely taxes the skill and therapeutic resources of the physician and often baffles both; which meets you in your daily round of professional life; which awaits your coming, and assails you in the houses you enter, when and where relief is asked of you from troubles almost universal and always distressing, to try to prevent and to avert which is the bounden duty and desire of every conscientious physician.

Although in text-books upon your library shelves preventive medicine respecting constipation is not classified among principal diseases, I nevertheless shall venture to call and to consider it a fundamental disease.

The importance of the subject of constipation, acute and chronic, is commensurate with its attendant consequences of discomfort, pain, distress, and disability. And I take it that the importance of this disorder of constipation and consequences will in your minds be greatly increased when a moment’s reflection will remind you that diseases caused directly by constipation demand the services and skill of (1) the general practitioner; (2) the neurologist; (3) the laparotomist; (4) the rectal surgeon; (5) the dermatologist; (6) the gynecologist. And I doubt not but, while this enumeration was being made, cases in your own individual practice referred to one or more of these specialists have occurred to the minds of many of you, which confirm and emphasize this important appalling statement. I do not propose to weary you with minute and descriptive detail of the anatomical arrangement and construction, nor of the physiological uses and functions of the portions of the intestinal tube involved in constipation; with this you became familiar in your student’s career, and have become even more so by your observation and experience as physicians and surgeons.

Constipation, as you are aware, is a condition of the bowels in which the evacuations are less frequent, or in less quantity than in health, and may be temporary or habitual. Torpor of the colon is one of the most common systemic conditions of habitual constipation. Habit is one of the most frequent causes of this complaint, arising from the fact that, by means of our individual control over the sphincter ani muscle, nature has endowed us to a considerable extent with the power of regulating the alvine discharges and of resisting the solicitations of nature at inconvenient seasons, while the bowel, thus habituated to the presence of feculated matter, feels the loss of its healthy stimulation and at length ceases to be excited into action. The rectum, the lowest and largest part of the large intestines, is not constructed to retain any thing for an indefinite period, but only to transmit or throw out what descends from the colon into it.

When compelled to retain hardening matter it contracts upon it, rendering it less easy of subsequent removal. At the same time the coats of the walls of the rectum, through its
mucous membrane will absorb much of the watery material present. The blood becomes poisoned and the disposition of the bowel to empty itself of such impacted and hard masses is gradually lessened, thus establishing a habit of constipation.

The principal causes of constipation are neglect, improper food, sedentary habits, disease.

Symptoms: Headache, dizziness, giddiness, languor, nervous excitability, irritability, nausea, biliousness, eruption of the skin, loss of appetite.

Persons chiefly subject to this disorder are students, writers, professional and business men whose calling necessitates an exhaustive use of nerve force; those of bilious, phlegmatic temperament, whose hepatic and other glands are torpid; women who are closely confined to office work, duty in stores and manufactories, and whose hurrying to time causes neglect of nature's call. Women more subject to constipation than men and for many and obvious reasons. Women are more careless about answering the calls of nature than men, and yet there are valid reasons why they should exercise greater care.

The mention of persons liable to and subjects of constipation suggests remedies and means of prevention and alleviation thereof. To the studios and to those of sedentary employment, exercise, regular and judicious, in fresh air and proper diet are absolutely required, even if change of occupation and location should become necessary. Lord Palmerston formulated this idea in a very happy manner when he said that he "considered the best thing for the inside of a man, especially the bowels, was the outside of a horse." This seems imperative when we consider the consequences or neglect thereof, viz., inflammation, prolapse and paresis of the bowels, creation of piles and hemorrhoids, tendency to produce hernia by straining or forcing an evacuation, intussusception, fissure both in adults and in children under two years.

The collection of hardening material in the intestine which becomes so impacted that urgent measures and painful and dangerous surgical operations are required to remove the same. And from constipation and its attendant evils and distress none are exempt. It respects and spares no age, race, nor class nor condition in life, claiming as its victims those of all years from the infant in the cradle to decrepit old age. Time and the proprieties of this occasion permit me to touch only the tops of things, and to indicate important points, and to make suggestions which most probably you anticipate and appreciate.

This paper, brief and imperfect as it is, is presented with an abiding conviction that the subject of constipation in relation to, indeed productive of, abnormal and diseased conditions of female organs has not received the attention from physicians which its importance deserves and demands. It is slighted by lecturers in in our schools; it is omitted in text-books; it is crowded out of the journals, and passed by inconsiderately by ourselves.

Root, in Southern Medical Record, calls attention to constipation as a frequent factor in pelvic diseases in women. The habit of constipation is largely due to carelessness, especially in childhood. In the adult female constipation is very frequent, and many of its symptoms point to pelvic disease; pain in the back, pain in the top and back of the head, a feeling of weight in the limbs, dysmenorrhea and leucorrhrea, subjecting the patient to local treatment, when changes in the mode of life with relief of constipation would restore health. It is also very evident that this disease acts as a most active factor in the production of pelvic disease in women; for where endocervicitis and even retroversion exist, rapid improvement is made as soon as constipation is relieved. Pelvic disease results from constipation through pressure and keeping up a constant condition of sluggishness of the pelvic circulation, amounting practically to a chronic congestion. Many cases of pelvic disease can be cured by the proper regulation of the bowels, and he cites cases in proof of this statement.

Two years ago there appeared in the London Lancet an able and very instructive article upon this subject from the pen of the eminent Sir Alfred B. Garrod. And a late number of the Archives Kinderheit Kunde contained a learned and practical paper covering a wider sphere upon this subject from Professor A. O. Karnitzky. Leucorrhrea is, according to Dr.
Louis Bauer, often due solely to constipation, hence clearance of the bowels of their fecal contents is in many cases the chief and most effective treatment of that troublesome disorder.

Dr. Robert A. Murray read a paper at the recent meeting of the New York Academy of Medicine: When he considered the intimate anatomical connection between the rectum and the genital organs, it would not seem strange that disease in one should cause disease or symptoms in the other.

Constipation, while not exactly a disease, was present in a large proportion of the cases which came under the care of the gynecologist, and was the cause of much trouble. The first symptom present in most cases was pain in the left side over the region of the ovary, then flatulence and constipation. By recalling the anatomical relations one could rapidly understand why the patient should have the pain in this region. The rectum lay on that side, the ovary and tube were almost in contact with it, constipation gave rise to congestion of the pampiniform plexus and vessels in the neighborhood. To relieve engorgement of these veins it was necessary to empty the rectum. The only apparent solution of posterior displacement in many virgins was pressure during defecation when there existed chronic constipation. Relieved the pressure by correcting the constipation, and the patient ceased to complain. In long-continued obstruction to the pelvic circulation caused by chronic constipation and uterine displacement we found hemorrhoids and an inflamed condition of the lower gut. Cathartics in these cases were likely to cause greater suffering by renewing inflammatory symptoms; relief would not be experienced until the communication between the genital and portal circulations had been made free: (1) by replacing uterus; (2) by use of rectal enemata.

In virgins chronic constipation also often caused a dragging and falling sensation in the pelvis, by giving rise to congestion and varicosity of the vaginal and uterine veins, and led in time by such congestion, and by the pressure forward of the distended gut against the vagina, to retroversion and prolapsus. In this condition correction of the retroversion did not give relief, since the starting cause was not retroversion, but rectocele. Cure the chronic constipation and the other symptoms would disappear. He had several cases in which this rectal distension had given rise to slight fissures at the entrance to the vagina, the passage of hard feces distending the rectum and sphincter, also stretching the vaginal fissures and causing much pain. A cure of the fissures could be effected only by overcoming the constipation.

Remedies beneficial in preventing and relieving acute and chronic constipation are careful, regular, and patient attention to nature's calls. One daily evacuation of the bowels is natural and usually all that is required in the majority of cases. While each one must be a law unto one's self, the demands of nature can not be disregarded with impunity. It is best to cultivate a habit of such movement at a regular and fixed time, that is, at the most convenient time of each day that is consistent with the calling of the individual. Among the pure drops of wisdom that fall in proverbs from the accumulated experience of ages, none is safer than to keep the head cool, the feet warm and the bowels open.

Dr. Beer has recently recommended mechanical dilatation of the sphincter ani in the treatment of chronic constipation. In practicing the manipulations he advises us to proceed gradually, both as regards the duration of the sitting and the amount of force exerted. Attention should be paid during the dilatation to the rhythmical contractions of the sphincter, which are partly provoked by the respiratory movements and partly result from automatic reflex nervous influences. In most cases considerable improvement was manifested even after eight or ten sittings. Although previously large doses of purgatives were required, defecation soon became regular, and small hemorrhoidal nodules disappeared.

Numerous medical and therapeutic agents are employed to great advantage. Drastic cathartics are considered injurious, but gentle laxatives combining tonicity are rather to be recommended. Enemata judiciously and regularly administered, have produced most satisfactory results, especially in sluggish alvine functions of infants and young school girls,
among which classes there exists this condition probably more frequently than in almost any other. In such instances the family physician should give to mothers and nurses very plain and positively explicit instructions regarding the distressing consequences of constipation, that they should feel it to be a duty to know that daily evacuation of the bowels should be as regular and as necessary as the taking of daily meals.

Dr. A. O. Karnitzky calls attention to the fact that massage has been but little employed in the constipation of infants, although it removes both this condition and the disease which gives rise to it, that is, atony of the intestines. He has employed this method with success in acute and chronic constipation in new-born and older children, but states that in order to obtain this result it must be used properly and for a sufficient length of time. The technique of massage in children differs in no essential particular from that in adults, although it should be modified in conformity with the position of the digestive organs at various periods of the child's life. Attention should therefore be paid to the anatomical position of the stomach and intestines in the new-born, especially on the left side, and to the position of the descending colon and sigmoid flexure. The manipulations need not be practiced on the right side, because the main cause of habitual constipation in children is the considerable length of the lower portion of the large intestine, aside from the weak development of the intestinal muscular layer. In the new-born the massage should be employed when the child is nursing, in order to prevent crying and marked tension of the abdominal muscles. The application of massage for as short a time as three minutes frequently gives the desired effect. The sitting should not last more than ten minutes. (Arch. f. Kinderheilkunde.)

Electricity, promotive of peristaltic action of the intestines in children and adults, has been highly recommended and used with satisfactory results.

Suppositories are safe, convenient, comforting, and satisfactory aperients, particularly where constipation is attended with piles and hemorrhoids. Many admirable and useful suppositories suited to various conditions and affections of the lower bowel have been furnished, which have proved very beneficial in the hands of our professional brethren, in private, hospital, and infirmary practice. The combination which has given me good results is glycerine, sulphur, nux, and henbane.

Food: As a valuable means of preventing and of relieving constipation diet should neither be overlooked nor forgotten. Nutritious articles of food should be regularly taken, well cooked and eaten slowly; a generous and general mixed diet containing sufficient moisture. Also animal food, certain vegetables, but especially fresh, acidulous fruits, in season and out of season.

I thank you, my Fellows of the Kentucky State Medical Society, for your kind and patient attention to this subject. Did I hear you say that it was homely? Rather it surely is a home-troubling subject. Probably you said that it was old and trite; old it may be, but like truth it perpetually renews its youth. And I conclude as I began, with direct reference to preventive medicine, and venture to repeat that the alleviation and prevention of acute and chronic constipation is deserving of your fostering care and beneficial efforts—continuous and uniring efforts. More than once have I called your attention to the great importance of preventive medicine as the leading, the vital question of the times, which should receive your most earnest thought and elicit your cordial co-operation.

And on the field of battle which preventive medicine is now and everywhere waging against the ills to which flesh is heir, the banner of preventive constipation is well at the front. Indeed I feel confident, and I do greatly rejoice in this assurance, that when the enthusiastic physician who is ever loyal to the guild, who keeps her escutcheon fair and stainless, who is ever jealous of her honor, shall proudly make mention of her achievements and triumphs for the benefit of suffering humanity, the prevention of constipation will not then be omitted.
ABSCESS OF LIVER: REMARKS ON SURGICAL TREATMENT.*

BY M. T. SCOTT, A. M., M. D.

On October 30, 1891, I was asked by Dr. Barnes, of Nicholasville, Ky., to see with him Carrie G., aged twenty-three, married, white.

Being an ignorant woman, and no one physician having been in constant attendance during her illness, it was impossible to get a satisfactory history of the case. About eighteen months prior to my visit, while running, she fell and struck her right side on a large stone. The point of injury was over lower thoracic region below the nipple. The pain was sufficiently severe to confine her to bed for six weeks. Though still sore and tender she then commenced attending to her household duties. Within the next ten days or two weeks a phlegmon appeared over the site of original injury. Fluctuation was soon after detected by a physician living in the neighborhood. He made two incisions and evacuated a large quantity of pus, she thinks nearly a gallon. Notwithstanding the continuous and copious flow she was married a month later. In six or eight weeks she became pregnant, and in spite of the copious and exhausting drain went to full term and was safely delivered. During her pregnancy she suffered much from hectic, as shown by sweats, rigors, and fever. I found her about midday, October 30, 1891, with a flushed face, temperature 101.75°; pulse 120; excessively nervous. In standing she bent forward very much in the posture assumed by one with abdominal cramp.

She removed a foul, ill-smelling pad from two freely discharging sinuses, two inches apart, in ninth intercostal space in mammary line. Pressure anywhere in epigastric or either hypochondriac region caused the free flow of highly offensive pus mingled with blood. Her nervousness was so great that she would not allow me even to attempt to map out the liver, much less introduce a probe into the pus tracks. She was at a railway station twenty miles from Lexington. Expressing a willingness to come to that city and enter the hospital, I deferred any further examination until I could allay her fears and get her away from her ignorant friends, who, as usual, added to her alarm. Despite all my entreaties she continued to nurse her five months' old infant during the entire time that she was under my observation. Her baby was remarkably stout and vigorous, showing no bad symptoms from the nutriment derived from so polluted a source. The first few days of the patient's hospital life were devoted to attempts to accustom her to civilization, endeavors to secure external cleanliness and regulation of diet and excretions. The surface of the abdomen was thickly encrusted with dried pus and blood. Her timidity was so great that she forbade all attempt at irrigation. After a number of washings we secured an abdominal surface, which indeed appeared beautiful outwardly, but was "within (I was satisfied) full of dead bones and of all uncleanness."

On November 10, 1891, assisted by Drs. Barnes, Skillman, Falconer, Moore, and others, I proceeded to make my first exploration of the wound. The tissues between the openings were divided, a common track ran along the ninth intercostal space to angle formed by junction of ninth and tenth ribs, where it turned backward and entered the chest cavity through an opening one third of an inch in diameter. This was enlarged by bone nippers, considerable sections of cartilage and necrotic rib being removed.

Further exploration revealed a pus pouch the size of a large orange at base of pleura, cut off from the general cavity by adhesions. An opening large enough to admit the index finger was found from this cavity through the diaphragm and leading down into the liver. This latter cavity, as near as I could determine by a sound, was as large as a quart cup. Both pus sacs were thoroughly irrigated and flushed with hydrogen peroxide. A double rubber drainage-tube was inserted, extending into the hepatic pocket. Operation lasted about thirty minutes. Patient was put between warm blankets, surrounded by hot bottles, and given stimulants. The shock was very marked. Temperature 95.5°; pulse running to 135. Reaction came on slowly. At no time did the tem-

* Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Society, May, 1892.
perature go above 101°. The discharge from the first lost its offensive character. While copious for a while, it gradually diminished until the removal of the tube on the thirteenth day, when it was practically nothing. She sat up in bed on the fifth day. The wound entirely closed by the twenty-first day. She rapidly regained her flesh and strength, and assumed the erect posture. She was kept under observation for four months. Her liver had assumed its normal size and shape, and there was no suspicion of any lurking mischief.

Remarks: The operative treatment of abscesses of the liver has, together with all other surgical procedures, undergone a revolution since the introduction of aseptic and antiseptic methods. The operator of to-day unhesitatingly evacuates pus wherever it is found, be it in the liver, kidney, brain, or other organ. To wait for the possible absorption of an hepatic abscess is not prudent.

Shall we wait for spontaneous opening? Hepatic abscesses have occasionally discharged at convenient points, and recovery following. More frequently, left alone, they pointed in unfavorable localities and death closed the scene.

Hepatotomy, or direct incision through liver tissue after laparotomy, is the usual and most satisfactory course of procedure.

By this method we are not groping in the dark, but can see what we are doing.

Omentum or coils of intestines that may lie between the abdominal walls and liver can be avoided. Divided blood-vessels can be secured, the abscess can be satisfactorily drained, and secondary abscesses searched for. While infection of the peritoneum can probably be averted, if unavoidable, the "toilet of the peritoneum" can be so thorough that no harm will likely result.

It is best to make our incision over the most prominent portion of the tumor. While the direction of the cut is not all-important, still, other things being equal, it had best be vertical. It should be long enough to admit of the proper manipulation of subjacent anomalies.

Should a perihepatitis have occasioned adhesions between the liver and parieties our opening into the pus sac should be through the adhesions.

Our section of liver structure must be done with care. Having located the exact site of the pus by an exploring or aspirator needle we can follow it down as a guide with a knife; having sufficiently enlarged the opening, the index finger can be inserted and the sac held up. A knife is now passed along the finger and the incision sufficiently enlarged. Peritoneal infection is prevented by close coaptation of liver and parieties, and the proper adjustment of sponges around the opening.

The pus pouch having been emptied, a careful digital examination should be made in search of secondary abscesses. These may be emptied and drained through the primary sac. The entire length of the hepatic and abdominal wounds are accurately stitched together, and the wound closed, a large drainage-tube having been introduced.

It seems to me that the line of treatment that I have sketched in a very superficial manner, as I did not desire to tax your patience, is the most desirable, rational, and safe course to pursue. Other methods have been in vogue from time to time. They have all been successful. Most of them were suggested before Lister gave us antisepsis and while the peritoneum was practically a "sealed book," whose secrets could only be revealed under the penalty of almost certain death.

Aspiration can not thoroughly empty the cavity, and a secondary abscess may escape detection.

By the use of the trocar intervening intestine or omentum may be punctured.

Operation by two incisions, at separate times, has been advocated by Graves, Volkmann, and others. The first step is to cut down to or through the peritoneum and wait a sufficient length of time for adhesions to form between the liver and the parieties; the secondary operation then consists of an incision through adhesion and liver tissue into the abscess.

This method takes days, and hours are often precious. It is intended to avert peritoneal infection. A misfortune by no means as serious as was formerly supposed, and one that can usually be averted by skillful manipulation.

Direct incision is indicated where pus has found its way into the subcutaneous tissues.
DYSENTERY: ITS ETIOLOGY, PATHOLOGY, AND TREATMENT. *

BY J. F. PURDOM, M. D.

I shall not worry you with a history of dysentery, in any of its bearings, from the literature of the subject, but shall endeavor to state what I believe to be the principal features in the etiology and pathology of the disease, with the leading indications for a successful treatment.

Dysentery, either sporadic or epidemic, is due to the same prime etiological factor; chronic dysentery (if there be such a disease) could only be the result of an uncured acute attack.

The difference in sporadic and epidemic dysentery exists only in the environments of the patient.

We are fully persuaded that dysentery is produced in all cases by a specific micro-organism as its prime etiological factor, and that the micro-organism must be taken into the digestive tract with our food or drink, and is not received in any other way; also that the presence of the micro-organisms do not always produce the disease, because the conditions necessary are not present. Just what those conditions are that are necessary for the development of dysentery in the presence of the specific micro-organisms we do not believe have been determined; yet we are fully satisfied that any condition that produces a pathological state of the mucus membrane of the rectum and lower portion of the large intestine with lowered vitality will predispose the individual to the disease; such as constipation or diarrhea, indiscretions in diet, sudden chilling of the surface after the body has been unduly heated by exercise, or exposure of the body during cool or damp nights after unusually hot days, and overcrowding are perhaps the principal predisposing causes which are avoidable. The predisposing causes which are unavoidable are atmospheric. Though we are unable to satisfactorily define those particular atmospheric conditions, yet they must exist to produce epidemic dysentery.

Dysentery is purely a local disease in so far as relates to the action of the specific cause, which attacks only the mucous and submucous membranes of the rectum and lower portion of the descending colon.

The micro-organisms find here, under proper conditions, a suitable soil for their reproduction and growth. The systemic symptoms are not due to the absorption of the micro-organisms into the circulation. The early systemic symptoms are reflex through the sympathetic nervous system, due to the action of the specific cause on the nerve periphery spread out in the mucous membranes involved, and to the absorption of the product which is a necessary result of the growth of the micro-organisms. Other things being equal, the nervous prostration will be in proportion to the amount of mucous membrane involved. As the case advances we have ulceration, due directly to the local action of the micro-organisms: from those ulcers we may have pus absorbed, and possibly produce the historic "hepatic abscess," but more especially at this stage we may have a general septic condition, the symptoms assuming a typhoid character, which is entirely due to the absorption of septic material furnished by the local action of the specific cause.

We may have a still more serious condition arise in the latter stage of the disease, especially during some epidemics, though it may occur in sporadic dysentery. I refer to a stage of collapse, which in some instances foreshadows death from twenty-four to seventy-two hours, a condition when once established we are powerless to relieve — this condition being produced in an exhausted patient by a large surface of the mucous membrane of the bowel becoming rapidly necrotic, with a corresponding absorption of the products of necrosis. Just here would very naturally arise the question, What has been the cause of such diversity of opinion with reference to the therapeutics of dysentery? That difference of opinion could only be the result of a misconception of the etiology and pathology of the disease. The fact that the nat-

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* Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Society, May, 1892.
ural tendency of dysentery is toward recovery, taken in conjunction with the nature of its pathology, enables us to understand why men would have apparently reasonable success with any form of treatment in which purgatives with an opiate was used. As before stated, the first systemic effect of the specific cause is by reflex through the sympathetic nervous system, suspending eliminative function; and it is the unloading of this pent-up secretion that has given to the much-vaunted ipecac its world-wide reputation as a specific in dysentery. The favorable action of ipecac does not exist in its specific properties, but in its ability in large doses to suspend absorption and exalt excretion. All the secretory functions of the body being abundantly acted on by a large dose of ipecac, nature's antiseptics are brought in contact with the specific cause of the disease as the secretions are discharged, while at the same time the free flow of mucus from the lower bowel, and the thorough emptying of the intestinal canal has much to do with getting rid of the microorganisms.

From this standpoint we readily perceive why ipecac is efficacious only in large doses not frequently repeated; also why all the benefit to be derived from the drug is usually obtained by the first two or three doses, because small doses do not arrest absorption or produce sufficient excretion, and if large doses are repeated at short intervals or continued too long, the secretory functions being exhausted there is nothing to excrete, and absorption arrested our patient failing to be nourished, he would necessarily become exhausted; hence, if not relieved by a few doses, the drug must at least be suspended to give time for the secretions to replenish themselves. For obvious reasons ipecac no longer holds the high place in the therapeutics of this disease it has previously occupied.

Dysentery being a local disease, and the specific cause occupying a field readily in reach of local remedies, the rational indications for treatment are irrigation of the bowel with hot water followed immediately by an antiseptic solution. The irrigation and antiseptic to be repeated from two to six hours apart, as indicated by the improvement in the case; a cathartic being given to relieve suspended elimination at the beginning of treatment, and repeated if required, as indicated by the state of the secretions. In most cases the choice of cathartic is between the salines and castor oil. A single purgative dose of calomel followed by a saline is sometimes an excellent prescription when there is a heavily coated tongue.

The bichloride of mercury in solution of 1-5,000 holds first place in my estimation of drugs to be used as a local antiseptic following irrigation of the bowel with hot water. About six ounces of the bichloride solution should be injected in case of the adult, and not allowed to remain longer than ten minutes before it is expelled. The bichloride solution should perhaps not be used more frequently than every six hours; however, if found necessary, the irrigation with hot water may be used, intermediately followed by a milder antiseptic, such as a solution of sulpho-carbolate of zinc or boracic acid. Those milder antiseptics would be preferable with infants and young children. The ability of sulpho-carbolate of zinc to deodorize the discharges speaks in its favor as an antiseptic in dysentery. In conjunction with the purgative and local antiseptics, an opiate becomes curative in its action by virtue of relief to pain and its tranquilizing effect on the nervous system, thereby placing the inflamed surfaces at rest. The opiate is best given by hypodermics of morphia and atropia, or by enemata of starch-water and laudanum.

In my opinion the injection of cold water in the bowel is never indicated, and in many cases it is absolutely harmful. The diet of the patient should be carefully regulated, according to the ability to digest food; but after the first forty-eight hours the patient should be as well nourished as possible.

The patient should be put immediately to bed on the advent of the first symptoms, and required to remain quiet until all irritation of the bowel is completely relieved.

I am fully persuaded that if the patient is seen early in the case, and is properly treated, with careful nursing in the absence of the doctor, there should not be any mortality from dysentery.

Louisville.
DISEASES OF THE KIDNEY.*

BY JOSEPH M. PATTON, M. D.
Professor of Internal Medicine, Chicago Polyclinic.

In considering diseases of the kidney I wish to avoid as far as possible the confusion which results from the various theories in regard to the etiology and pathology of nephritis, and in the limited time at our command endeavor to bring out such points in pathology, diagnosis, and treatment as may have particular interest to us as clinicians. Frerich's theory, that all the various morbid conditions to be found in acute and chronic nephritis are the different stages of a single pathological process, was opposed by Traube and others, who claimed the varying nature of these processes. Later studies of these affections, while establishing clinical and pathological distinctions between the large white kidney of parenchymatous nephritis and the small contracted kidney of interstitial nephritis, also show that in some instances the later condition may be the result of the former.

The elaboration of nephritic pathology has resulted in considerable confusion of terms, and we find as many varieties of nephritis as there are writers on the subject; such as acute diffuse nephritis, chronic diffuse nephritis, acute and chronic parenchymatous nephritis, glomerular nephritis, chronic interstitial nephritis, etc. The morbid anatomical appearance of these various forms being represented by the large and small red kidney, large, pale, or white or fatty kidney, small or granular kidney, the waxy kidney, the cirrhotic kidney, etc., almost ad infinitum, until we reach the declaration of Mahomed, that we may have Bright's disease without kidney lesion, meaning that there may be a general diathesis or condition involving the blood, vascular system, assimilation and functional condition of the various organs which may comprise the initial pathology of the disease, and of which the kidney lesion is an effect.

Clinically we have two forms of kidney disease, acute and chronic. You must remember that there are three anatomical structures in the kidney, the vessels, the secreting tubes with their epithelial lining, and the connective tissue stroma which supports the tissues. Now, according as disease may affect primarily or entirely one or the other of these tissues, we will have varying pathological changes as well as clinical manifestations. You must remember that these changes are seldom confined to one of these anatomical elements, but that all are generally more or less involved, hence many cases are difficult to classify, clinically or pathologically. The majority of cases, however, will present sufficiently definite symptoms to admit of their being properly classified.

A classification which corresponds at the same time to the clinical symptoms and the chief pathological changes is the most practical one, hence we divide nephritis into two forms, acute and chronic.

Acute nephritis may be sub-classified according to the histological elements which are primarily involved, but from a clinical standpoint this is not necessary. Under the head of acute nephritis I include those forms called acute diffuse, acute parenchymatous, catarrhal, tubular, glomerular, croupous, and desquamatous nephritis.

In acute nephritis the vascular hyperemia and congestion is more marked than in other forms. There may be extravasations of blood within the tissue or tubes. The pathological changes are inflammatory in nature, and affect the epithelial structures lining the tubes and capsules of the glomeruli. Whether the cells of the tubes or glomeruli are the most important in this connection is a matter of dispute. In the simpler forms the cell changes are most patent in the convoluted tubes. In that form which follows scarlatina the cells of the glomerulus is most affected. The cells become cloudy and swollen, they become detached from the basement membrane and lie loose in the tubes. They may have undergone granular or granulo-fatty degeneration, and the tubes be filled with broken down cells and fatty matter. Sero-fibrinous exudation is always present in the tubes, cellular infiltration between the tubes is always present, sometimes very slight, sometimes quite marked, involving the tubes, and in the glomerular variety, in connection with nuclear hyperplasia of the endothelial nuclei, may cause compression of the vascular tuft and subsequently contraction.
These kidneys you will find two or three times as large as usual; the surface is smooth and mottled. The capsule will strip off easily, the cortical portion is thicker than normal, it may be darker or paler than normal, the medullary portion is darker than natural.

Chronic nephritis manifests itself in three forms, the clinical symptoms corresponding with comparative regularity to the pathological changes. These forms are chronic parenchymatous degeneration, chronic interstitial inflammation, and amyloid degeneration. Amyloid degeneration is generally connected with certain general cachexia or dyseresia, and we will not consider it to day.

In chronic parenchymatous nephritis the pathological change is essentially one of degeneration, affecting principally the cellular elements, particularly of the convoluted tubes. The cells lining these tubes are exfoliated in all degrees of change from cloudy swelling to granulo-fatty degeneration. The tubes may be packed with them. The intertubular tissue and spaces become filled with granulo-fatty matter which is also found in the external coats of the blood-vessels. Fibroid development in this form of nephritis may be slight, and only found in the glomerular capsule, walls of tubes or blood-vessels; or it may be sufficient to cause slight adhesion of the capsule. Hyaline exudation is considerable. These kidneys are two or three times larger than normal, they are white or pale, their surface is smooth, and a yellowish white, the capsule is stretched and tense; the enlargement is due almost entirely to increase in the cortical portion of the organ. The tufts are atrophied or surrounded by granular matter, and are not very prominent.

In some cases there will be only cloudy swelling and hyaline exudation, the tubes will be much distended with their cellular contents, which, with the exudation, will compress the vessels, and the kidney presents an ivory-white surface.

The small, granular, fatty kidney is a combination of these processes and those of cirrhotic kidney, but the kidney is larger than in the cirrhotic variety. In chronic interstitial nephritis the change is one of connective-tissue development. Hyperplasia and cell infiltration is found in the malphigian tufts and capsules, in the intertubular tissue, walls of the arteries and capillaries, and walls of the tubes. This tissue will contract and compress the vessels and tubes. The cells lining the tubes atrophy and become granular, and are thrown off into the tubes; they are either washed out, leaving the tube empty, or if the contracting tissue compresses the tube, obstructing it, the tubes may be filled with granular matter. Where the tissue development is extensive the interpyramidal portion of the kidneys become affected. These kidneys are small, may be one fourth the natural size, they are hard and lobulated, the capsule is thick, tough, and strongly adherent to the kidney tissue, which you will tear in attempting to remove the capsule; there are usually small cysts in the cortical portion. The loss of substance is mainly confined to the cortical portion. I recently obtained a kidney of this kind which weighed a fraction over one ounce.

We will not take time to go into the nature of the production of albuminuria or dropsy; there are some associated lesions of the heart and vascular system which are of greater importance. Clinically, cardiac hypertrophy with increased vascular extension has long been recognized as a more or less constant attendant upon kidney lesions; formerly they were considered as due to and secondary to the kidney disease in all cases; latterly it is conceded that in many instances they result from a general condition in which the kidney lesion is of secondary importance.

In interstitial nephritis it was claimed by Rayer that the renal affection was secondary to the cardiac lesion; again it was claimed that the renal lesion was primary, and according to Traube the cardiac hypertrophy was due to obstructed circulation through the kidneys; again it was due to arterial spasm caused by irritating material in the blood which should have been eliminated, or, according to Gull and Sutton, to arterio-capillary fibrosis. The essential nature of the arterial changes in these cases is still a matter of discussion. Clinically, we find all the classical signs of hypertrophy of the heart in persons with sclerosed arterics or kidneys, or both; in these cases
Obstruction to the circulation will explain the cardiac lesion. We also find, in cases of acute and in the transition stages from acute to chronic parenchymatous nephritis, cases of well-marked cardiac degeneration and dilatation combined with hypertrophy; these cases develop too rapidly, and dilatation results too early to be the result of obstructed circulation. We must assume that there is a concomitant degeneration of the cardiac muscle with the progression of the kidney lesion, and due to some toxic condition of the blood in all probability.

Here is a young girl who had scarlatina three or four months ago; she developed acute nephritis subsequently; she came into this clinic three weeks ago with considerable edema of the limbs, slight puffiness under eyes, urine contained one third albumen by bulk, and granular casts. She had considerable dyspnea, her heart was markedly dilated, it has improved with her general improvement, but you notice that its action is labored and tumultuous; the area of dullness is increased to the left, but not much downward; it is difficult to locate the apex beat exactly, because of the diffuse motion. Now this condition would not develop as soon as this from circulatory obstruction, but if we accept Senator’s statement that cardiac enlargement in cirrhosis of the kidney is simple hypertrophy, and in parenchymatous nephritis it is eccentric, implying an accompanying degeneration of the cardiac fiber in the latter form, then we can explain the early appearance of the dilatation in this case. The cardiac condition in this girl is essentially degeneration and dilatation, and these conditions have not received the attention they deserve in connection with kidney lesion.

In this man, for instance, who came here on account of his breathing, his heart is degenerated and dilated, the hypertrophy is not marked, but the dilatation is considerable; he has chronic nephritis. A large percentage of the cases in this clinic show the classical signs of degeneration and dilatation rather than those of hypertrophy. Debove claims that the rhythmic disturbances of the heart which are so common in interstitial nephritis, as the bruit de galop, for instance, which is described so clearly by Potain, was due to fibroid degeneration of the heart synchronous with that of the kidney.

It seems to me that many cases of acute and chronic nephritis, show cardiac changes which can only be explained on the ground of granular degeneration of the heart muscles.

Acute nephritis, when due to exposure, scarlatina, or from renal irritants or poisons, may begin with a chill and rapid rise in temperature, followed by high-colored, scanty or bloody urine, with dropsy of face and feet; there may be pain over the kidneys which may in severe cases radiate down the ureters into the penis and testicles. In those severe cases with temperature of 106° to 107° uremic coma and convulsions may come on early and death may result in a few days, or recovery may gradually follow with permanently disabled kidneys. Usually they will present less active symptoms in which dropsy or waxy complexion is first noticed. The symptoms presented by this young lady is a fair sample of the average case. After an attack of scarlatina she thinks she noticed a period for a few days when her urine was scanty and red in appearance, but she is not clear on that point; usually they do not attach much importance to this. Shortly afterward she noticed her feet and legs were swelling, and her face, especially under her eyes, was puffy in the mornings; her urine decreased in quantity, and had to be passed frequently; she developed dyspnea with the cardiac conditions which we have mentioned. When she appeared in this clinic her urine contained much albumen and granular casts, the specific gravity was 1018, the quantity was near the normal, and the dropsy was somewhat less; the amount of urea is increased, though absolutely it is diminished from one third to one half. Early in these stages the urine will contain small hyaline and epithelial casts, and perhaps blood globules; later there will be large hyaline, granular, or fatty casts.

In some cases headache, nausea, and vomiting may be the prominent symptoms with or without symptoms of uremia. These cases may prove rapidly fatal, or after extensive dropsy has developed the urine will increase in quantity and the patient may pass on to recovery.
In chronic parenchymatous nephritis, which results from the acute conditions, the symptoms gradually merge into those of the latter, there may be a history of an acute attack which is difficult to obtain, or in those cases where the anasarca is great and the condition apparently desperate the symptoms rapidly improve and the patient is apparently recovering. Slight edema will remain about feet and eyes, the urine is abundant, and sooner or later the dropsy will increase and will oscillate during the course of the disease. In those cases chronic from the start, edema will follow the same course as in those resulting from acute conditions; it is often the first symptom to attract attention; it may be only slight edema about the ankles, or may be very extensive and the patient become actually water-logged before uremic symptoms develop. There is also increased frequency of urination, the amount of water may be twice the normal, but it is seldom as much as in interstitial nephritis. It is pale in color, the specific gravity will be from 1004 to 1010. There is generally albumen; it may be very small in amount, but it is never absent for any great length of time; there will be granular, fatty, or hyaline casts, though these may be absent for considerable periods. You will generally be able to get some history of an acute phase; gastric and nervous symptoms may be present or may be absent till near the end. There is generally marked failure of nutrition, shown in the mental condition by the dry skin, brittle nails, and waxy, dirty, yellow complexion; cardiac changes are usually present. The retinal symptoms are important in this form of nephritis. They will be demonstrated to you by another department.

Irregularity in its course is a special characteristic of this form of nephritis. There may be successive exacerbations in the disease, but sooner or later one of these will develop into convulsions or coma, and death will result.

In chronic interstitial nephritis there may be in the earlier stages or lighter forms of the disease almost entire absence of symptoms. Often in making autopsies we will find evidence of this form of nephritis where it has never been suspected, and if it were not for our search for a cause for the cardiac changes, which are more or less constant, we would overlook many more cases.

These patients notice that they are growing weak, there is constant lassitude and indisposition; they will notice that they are passing more water, may complain of having to rise at night to empty the bladder; the urine is pale, specific gravity 1004 to 1010; there may be a trace of albumen, though this may be absent temporarily, slight edema over ankles, especially at night; this slight swelling is not constant. Some cases exhibit loss of appetite or dyspeptic symptoms, acidity of stomach, anorexia, irritable temperament, or loss of memory, insomnia, and sometimes distressing headache.

This man here presents a common history for this disease. A year ago he had an attack of *la grippe*; some time afterward, his recovery being very slow, he noticed failing strength, having considered himself quite an athlete previously, then loss of appetite and of memory; then he states that he noticed that he was passing more water than usual, but thought nothing of it as it was paler and caused him no trouble; latterly he noticed dyspeptic symptoms and some shortness of breath, which grew worse, and he came to the clinic because of the difficulty of breathing. We find his heart enlarged and degenerated; there is no valvular lesion, his arteries are not specially hard, so we look to his kidneys; his urine is abundant, specific gravity 1006, no albumen by heat or nitric acid; there are small hyaline casts; occasionally he has slight edema around ankles, which he says is not present in the morning. I would also call attention to the peculiar rhythm of his heart. It is the *galop* rhythm, described so clearly by Potain as a peculiar form of rhythmic disturbance often associated with interstitial disease of the kidney. There are three heart sounds to be heard, the second of which is accentuated, resembling the sound produced by the hoofs of a galloping horse. The cardiac lesion in these cases is said by Debove and Le-tulle to be sclerosis of the columnae of the left ventricle resulting from sclerosis starting in the vessels of the heart; they assume a fibrous diathesis, in which both heart and kidney lesions are due to some lesion of nutrition, being otherwise distinct affections.
In the later stages of interstitial nephritis the urine becomes very abundant, the amount of albumen remains small, casts never abundant; you will find occasional hyaline, or possibly granular or fatty casts; the amount of urea is near the normal. The amount of water passed is no indication of the amount of solids, and an examination of the total solids in the urine is the only way we can judge of the actual work the kidney is doing. Complications, overwork, or exposure may bring on an acute attack resulting in coma and death.

Some cases exhibit only gastro-intestinal symptoms, in others they are mainly nervous. In some there is only gradual exhaustion and decay.

Dropsy is never a prominent symptom of this form of nephritis, and may not be noticed unless sought for. If it does appear to any great extent it is probably due to secondary parenchymatous inflammation of some portion of the kidney.

Cerebral hemorrhage is apt to occur in this form of nephritis, especially if the vascular changes are marked. Peri- and endo-carditis are also common, as are bronchitis and pleurisy. Neuro-retinitis and hemorrhage are common.

In the treatment of nephritis it is important to separate the acute and chronic varieties. In the acute nephritis the main indication is to improve the functional activity of the kidney and to relieve it of the irritation produced by acid urine, and imperfectly transformed excretaitious products. This is to be done by using the skin and bowels for elimination. In using the bowels you would not use the same class of drugs as you would were you trying to relieve the dropsies. Calomel, aloin, podophyllin, and such medicines which stimulate the biliary action, and at the same time increase the solubility of the intestinal contents, are necessary. The administration of the diuretic waters, as Lithia and Bethesda, should be pushed in order to dilute the toxic material in the urine as much as possible, and thus lessen the irritation of the kidneys. The treatment directed toward the kidney should be as unirritating as possible; as a rule the nitrates should not be given, as they are too stimulating. Digitalis is the best, using the infusion in tablespoonful doses, once in two to four hours until you get a response. Small doses of citrate of potash with triticum repens in a little syrup of lemon is useful as an adjuvant to the action of digitalis. Milk is the diet for these patients, and they should be confined to it almost exclusively.

In acute cases with dropsy and threatened uremia more active measures are adopted. Hypodermic injections of from \( \frac{1}{2} \) to \( \frac{3}{4} \) grain of pilocarpine to produce diaphoresis, or hot air baths may be used. Place the patient in a chair, cover him with a tent of blankets, and then introduce hot air until profuse perspiration is induced.

Dry cups over the region of the kidney are very useful to relieve pain and lessen the congestion of the kidney; nervous symptoms threatening uremia are to be controlled by hypodermic injections of morphia. The bowels should be kept freely open; calomel, compound jalap powder or eleterium may be used when the dropsy is great and the kidneys slow in resuming their function.

In chronic parenchymatous nephritis the indications are much the same as in the milder cases of acute nephritis. You will endeavor to improve the nutrition of the kidneys, also their functional activity, and lessen the degenerative changes as much as possible. The general nutrition should be pushed as much as possible; milk diet, mixed with vegetable and farinaceous articles. Iron should be given continuously. I prefer the so-called tasteless tincture as the most eligible.

The stimulation which you will give the kidney will depend on the amount of albumen and urea present in the urine. Generally speaking, diuretics need not be so continuously or actively administered as in acute nephritis. The alkaline mineral waters are particularly valuable in this form of nephritis. Calomel in three-grain doses until six doses are taken, giving it three times daily, is particularly valuable as a diuretic. Fothergill's pill, containing a grain each of calomel, digitalis, and squills, is very valuable. Tablespoonful doses of digitalis with 10 grains of citrate of potash, and 5 drops of tincture of opium, if there is any tendency
toward contraction of the vessels, is a valuable combination.

Benzo-sodiate of caffeine is very useful at times. Trou-seau's diuretic wine is another good combination. Drastic purgatives may be used in conjunction with the above remedies when anasarca develops. Oxygen inhalations are valuable to relieve the amount of albumen when it remains constant in spite of other measures. Fuchsine is said to reduce the amount of albumen in many instances; it should be pure, as it is liable to contain arsenic; it may be given in four-grain doses in capsule twice a day. The various vegetable and mineral diuretics are useful, and all have their place in certain instances.

Diet, hygiene, and climate all have a marked influence on chronic nephritis, and should always be taken advantage of in its treatment. In chronic interstitial nephritis the cases come under our care usually at a period when recovery is impossible, consequently drugs have a less important place in this form of kidney lesion. Usually the indications are for attention to the general condition with which the disease is surrounded, as the gouty or uric acid diathesis, or rheumatic conditions. Dietetic, hygienic, and climatic therapeutics are especially applicable to this form of nephritis. Milk and the alkaline diuretic waters are useful. General tonic treatment specially directed to preventing degeneration of the heart is imperative. Iron, cod-liver oil and the iodides are useful here.

Those remedies which prevent and relieve increased vascular tension are necessary at times. If heart failure is to be combated it is necessary to give a combination of heart stimulants and vaso-dilators. I prefer digitalis and opium, or nitroglycerine may be used. A warm climate is best for these patients, in the Middle States during the summer, and on the Gulf coast, in the Carolinas, or in New Mexico, Arizona, or Northern Texas during the winter. They should not visit the high altitudes.

When cirrhosis of the liver is present and ascites develops, aspiration should be performed as soon as discomfort results from the fluid. In general anasarca, incisions, punctures of the skin, and insertion of drainage-tubes under the skin may be practiced as a means of relief.

Senator recommends in nephritis the giving of food in small quantities and often, prohibiting eggs, cheese, or alcoholic liquors and beer, recommends a vegetable diet, poor in albuminoids, a limited quantity of fats and red wine may be allowed. The administration of moderate quantities of very dry wines often has an excellent tonic effect in nephritis, although the indiscriminate use of wines is to be discouraged. Lactate of strontium has recently been used with good effect in reducing the amount of albumen in urine in nephritis by Bucquoi, Dujardin-Beaumetz, Paul and others; it is placed on the market in the form of a syrup and a solution, each containing 60 grains to the ounce, which may be given in doses of one or two teaspoonfuls as often as may be required. The salts of strontium are well borne by the stomach, and from 1 to 2 drams may be administered in the twenty-four hours.

Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, July 6, 1892. Dr. F. C. Simpson, President, in the chair.

Dr. C. E. Skinner: I was asked by Dr. J. S. Bennett to see the patient from whom this specimen was removed about ten days ago. Upon examination I found the uterus very much fixed and tilted to the left side. The patient had aborted about eight weeks previously, suffering a great deal of pain. I detected a foreign body to the left and back of the uterus, and advised an operation. Her temperature had been ranging from 100° to 103°, and she had been taking morphine to counteract the pain. Last Saturday I operated, removing both tubes and ovaries; Dr. Cecil assisted in the operation, Dr. Bullock administering ether, Dr. Bennett present. We found the most peculiar appearance that I have ever seen; the uterus was pushed to the left side; it seemed that a membrane or cover had been thrown over the uterus, ovaries, and tubes, and when this was broken through, a tumor about the size of a goose egg was found immediately behind the uterus. The tube was firmly united to the

*Stenographically reported by C. C. Mapes, Louisville, Ky.
ovary by adhesions, and in attempting to remove the tumor, a small abscess was broken, the pus being removed with the sponge. The right ovary was found to be cystic and very much swollen. The cavity was thoroughly washed out, and on account of there being a small amount of pus, a drainage-tube was inserted. The operation was performed about nine o'clock in the morning, and that night about ten o'clock I removed the drainage-tube, no fluid coming from it whatever. The woman has gotten along without an untoward symptom. Temperature for the last three or four days has been perfectly normal.

Dr. A. M. Cartledge: This case illustrates another phase of pelvic inflammations and how varied these cases are in their pathological appearance. It is one phase of tubular trouble in which there is especial involvement of the peritoneum and the broad ligament. The fleshy material removed shows more or less recent involvement of the peritoneum and broad ligament. This leads me to believe that the membrane mentioned was inflammatory in character; a broad curtain of adhesions. I have encountered this condition several times. I operated upon a case not long ago where the broad ligament was inclosed in a curtain of strong membrane. This case illustrates that there may be extensive involvement of the peritoneal structures without a great deal of pus—a pyosalpinx of this peculiar kind.

Dr. C. Skinner: My idea was that this curtain was inflammatory in nature; every thing in that fossa was adherent. When we broke through this membrane I remarked at the time that it felt like sleet formed on the top of snow.

Dr. D. T. Smith: I have two clinical cases to exhibit. They are both patients of Dr. Trunnell, and it is with his permission that I present them here to-night. I have never seen either case until to-day. The patients were both in as good health as children of this character usually are up to about two weeks ago, when they were taken ill about two days apart in exactly the same manner with constipation, vomiting, and dizziness. You will notice a peculiar stagger when they attempt to walk. In the elder child the knee-jerk is very much impaired in the right leg, but not altogether absent. In the left leg the knee-jerk is unaffected. In the younger child the knee-jerk is slightly exaggerated. There are six children in the family, the other four older than these, and all four in excellent health.

Dr. J. W. Irwin: I am not inclined to attach much importance to the absence of the patella-tendon reflex. I do not think in either case there is any central brain lesion, nor do I think there is a tendency to locomotor ataxia. I believe the whole trouble might be easily explained by both of the children having had some form of meningitis of the cord. The meningitis might not have been sufficiently severe to cause much fever or much depression. From the peculiar motion of the children, without any history or any thing else except their appearance, I would not be inclined to attribute the trouble to any central brain lesion, but to inflammation of the lateral spinal nerves at their roots; what the cause of it is, of course I do not know; we have an imperfect history; it might have been syphilis. However, it simply looks like a form of meningitis that we see every now and then.

Dr. J. A. Larrabee: It is quite an impossibility to arrive at a diagnosis in cases of this kind without a very careful history of the children in infancy. That history, important as it is, seems to be entirely lacking. I am inclined to think, from the scars on the back of the last child examined (the older one), that the trouble is of a syphilitic nature. Without any history of syphilis or early syphilitic eruption, which could only be obtained from the attending physician or the probably quite unreliable statements of the mother, I should strongly favor a syphilitic lesion as the cause of this trouble, although there is no evidence of it from an examination of the teeth of the older child. In regard to the younger child, it is too young to look at the teeth. I think they would be relieved by the administration of anti-syphilitic agents.

Dr. D. T. Smith: I am quite in the dark in regard to the nature of these cases. In my reading, as far as I can remember, I never came across any thing like it. Concerning the point raised by Dr. Irwin, as to the locality of the
lesion, there is a distinct disease which is connected with the lateral portion of the spinal cord, and that is accompanied with spastic symptoms, and there is nothing of the kind in these cases. Vomiting would be accounted for only by a stomach trouble or reflex cerebral trouble. The constipation could not be accounted for by involvement of the lateral column. The peculiar character of walk is indicative of lesion in the cerebellum. A strange feature is that both children were attacked about the same time and have identically the same symptoms. Every one knows how nearly impossible it is to locate the seat of troubles of this character in the brain, unless it be in the motor centers. There is no history of syphilis and not a syphilitic sign. The scars might have been caused by something else, and possibly the family could give some history of them. Never having before seen or read any thing of the kind, I would certainly be far from being positive as to the cause of these conditions.

Dr. J. W. Irwin: In regard to the point of diagnosis: In cases of disease of the cerebellum we usually have a traumatic or syphilitic history. In these cases the doctor excludes syphilis, also traumatism. There is another symptom connected with cerebellar disease which the doctor has failed to mention; the child, or even an adult, would be very different, apt to shed a great many tears when attempting to look at you. Both of these children, notwithstanding their tender age, are not alarmed at our presence. Then, again, cerebellar disease does not come on so suddenly.

Dr. A. M. Cartledge: I present specimens of a very interesting case which came to the city some time ago, a patient of Dr. Holloway. The patient was a young man from down in the mountain country, about twenty-eight years of age. He says when he was seven or eight years old he first noticed an enlargement about his hand. This extended to the bones of the feet, involving also in a marked way the bones of the lower extremities; in fact, nearly all the bones of the extremities. The enlargement of the left foot, the specimen which you see here, shows for itself. The right foot was also involved to some extent. One toe was removed from the right foot some years ago, the result of an injury. This young man suffered with typical, multiple enchondroma, which became so extensive as to render him comparatively helpless. He came to this city and applied for relief to Dr. Holloway, who kindly called several gentlemen in consultation, and it was decided to do just as conservative an operation upon him as possible, getting rid of the most cumbersome part of the disease, leaving him all the extremities possible. The right index finger was enormously enlarged, and was removed, which you see here, the specimen looking very much like a large potato. This was the only portion of the right hand affected, leaving him the thumb and three fingers. The left hand was extensively diseased, and there was nothing that could be saved except the little finger. In order to minimize shock, it was deemed best to do a simultaneous triple amputation, operating upon all parts at one time so as to get him off the table as quickly as possible. The man was placed on the table and the operations performed and dressings applied in about twenty-two minutes. Unfortunately he had some little septic inflammation, but has gotten along very nicely and is very nearly ready now to go to his home, after a period of three weeks.

Dr. W. O. Roberts: It is an exceedingly interesting case, and undoubtedly one of multiple enchondroma.

Dr. H. H. Grant: One of these specimens, I think the finger, presented indications of ulceration, and we thought it was possible that sarcomatous degeneration was taking place in it. There was no pain in this growth, and sarcomatous degeneration in any structure where the circulation is interfered with to the extent it was in this case would be likely to occur. And it was considered by all those present at the operation that there was a likelihood of the disease developing in other parts of the body, so that the operation was done mainly with a view of relieving the patient of the great encumbrance rather than with the expectation of permanently curing him. No microscopical examination has been made of the specimens.

Dr. W. L. Rodman: The case reported is certainly a very interesting one. I have seen several cases of multiple enchondroma about the
fingers and toes, but have never seen one where the growths were of such size as in this case. I think there is no doubt about the diagnosis.

Dr. W. O. Roberts: I operated upon a case to-day for inguinal tumor, patient thirty-nine years of age, so far as we could learn with good family history. This growth was first discovered in January; while bathing she detected a little lump in the groin, which, at that time, seemed to be about one and one half inches in length and an inch in width. It was perfectly movable and gave her no pain. Three months ago it became very painful and then commenced enlarging. To day, when we operated upon her, it seemed to be about the size of your fist—she was an exceedingly fleshy woman. She was put under the influence of chloroform and I was assisted in the operation by Drs. Yandell, Rodman, Pierce, and Metcalfe. The tumor was located below Poupart's ligament, and was very firmly attached to the deep tissues and had to be carefully dissected off. This specimen seems, to me to be a typical one of melanotic sarcoma. It has not been examined microscopically.

Dr. A. M. Cartledge: I think there is no doubt about this being a case of melanotic sarcoma, which occurs most frequently between the ages of thirty-five and forty-five. All the cases I have seen of this form of sarcoma have gone on rapidly to a fatal termination.

Dr. W. L. Rodman: I had the pleasure of witnessing and assisting in this operation. From an examination of the tumor before the operation I was fully satisfied that it was of a malignant nature. We were also satisfied that the attachments of the tumor to the deeper tissues were very extensive; the tumor was not at all movable upon the subjacent tissues. We diagnosticated sarcoma, as they are common in this situation, and carcinoma practically unknown. As we anticipated, we found the tumor very firmly attached to the surrounding tissues, and it required a very tedious and careful dissection to remove the growth without rupturing any of the large vessels; in fact the tumor was the most adherent one that I have ever seen. This, however, is a characteristic of growths in the inguinal region. If the microscopists would confirm what seems to be undoubtedly a fact, from the appearance of this growth, that it is melanotic sarcoma, it would make the prognosis a very gloomy one, as these cases usually run a speedily fatal course. If this report is made by the microscopists, I think it would be a good thing if Dr. Roberts would inoculate this woman with the germ of erysipelas, and try and produce such a change as would prevent a return of the growth. I do not mean to say it is by any means definitely established that the inoculation of erysipelas will prevent the return or cause these malignant growths to disappear, but a great many observations have been made that would tend to prove that it is not entirely improbable. I have recently read some very interesting reports made by Dr. Coley, of New York, where the germs of erysipelas have been inoculated in patients suffering from inoperable sarcomatous disease, with very good results. There is abundant clinical evidence to prove that an attack of erysipelas may cause a malignant growth to disappear, and certainly in cases of this kind, where the prognosis is so very gloomy almost any thing is justifiable.

Dr. A. M. Cartledge: Dr. Rodman has called up a subject in which I have had quite a unique experience. Several years ago, after the discovery of the microbic origin of erysipelas, I tried the inoculation plan on three cases of sarcoma which took it very nicely, but it did not seem to produce any results, favorable or otherwise. In another case I tried four or five times to inoculate the patient, but never succeeded; however, he finally got entirely well. In this case there was a mistaken diagnosis.

Dr. W. O. Roberts: I have never had any experience in the inoculation of erysipelas in cases of this character. I would rather wait for a recurrence before attempting it. In the case reported, I believe there will be a recurrence of the tumor. The patient from whom this specimen was removed was forty-five years of age; her mother had a cancer which was the only other case in the family. She developed a small growth in the axillary portion of the mammary gland, which was removed by a gentleman in this city three years ago last spring. The following fall there was a second similar growth removed a little further toward the axilla than the first, on the same side. Then, the
following spring (two years ago this spring), I removed both breasts because of malignant growth. She had no further recurrence until the following January, then it occurred on the side from which the two former growths were removed. I removed that a year ago last spring. Dr. Rodman assisted me, and we cleaned out the axilla and every thing that we thought at all suspicious. Last fall the growth recurred under the clavicle, and then further operation was declined. She had never been able up to that time to take morphine without its producing excessive nausea. In December the pain became so great that she was forced to resort to morphine, and it was given in one fourth grain doses hypodermically. It produced no nausea at all, and she took from one to two doses per day. In the course of a week the dose had to be increased to one half grain. In January she was taking as much as one half grain twice a day; during the month of January she never got more than one grain at a dose. After that time the quantity was gradually increased until in March it became necessary to give her five or six grains of morphine hypodermically; this is as much as a hypodermic syringe filled with water would dissolve. Then we got a larger syringe. In April the dose had to be increased until it could be no longer given with the larger syringe; then we used a small aspirator. The dose was increased one half grain at a time until she was taking, in the latter part of April, twelve grains every three or four hours. We then increased it to fifteen grains, the aspirator would hold no more, and we had to give it by the mouth. The quantity was steadily increased, so that by the 26th of June she was taking thirty grains of morphine by the mouth six times per day, a total of one hundred and eighty grains. This quantity was continued up to the time of her death, which occurred on the morning of the 4th of July. During all the time she was taking these enormous doses of morphine, it never produced the slightest drowsines, and we were compelled on a number of occasions to resort to other drugs for the purpose of giving her a little rest.

One interesting point in connection with the case is, that this is the largest quantity of mor-

phine that I have ever known any patient to take. Another point of exceeding interest to me is, that while this growth continued to increase until it attained almost the size of a man's head, producing the most enormous edema on that side, necessitating punctures being made every day to let out the effusion, and while after the growth reached this enormous size and looked at several places as though it was going to ulcerate and break down, and I was expecting this all the time, yet it never did. There never was any opening in the skin. In looking the subject up I find that in secondary growths of this character ulceration very rarely takes place.

Dr. W. L. Rodman: I saw this patient for Dr. Roberts while he was absent from the city, and, as he says, this secondary growth was of enormous size. The skin looked in many places as if it was going to break down. I had read Snow's work on cancer, and predicted that it would never ulcerate. Snow makes the most remarkable statement that I have ever seen in print. He reports over nine thousand cases of mammary cancer, and states that when the growth appears secondarily in the opposite breast, it has rarely, if ever, been known to ulcerate. This is an extraordinary statement, and must apply to a great extent to other secondary deposits.

Dr. H. A. Cottell: I had a little experience with a case of cancer last spring, in which large doses of morphine were given. I think perhaps the highest dose in this case was six grains, but it produced no drowsiness whatever. We gradually worked the dose up from one fourth grain to as much as the water contained in the hypodermic syringe would dissolve. We thought with this dose we ought to observe some narcosis, but the drug had only an analgesic effect, proving, as has been said, that "pain is the best antidote for opium."

Zeal and Discretion are like the two lions which supported the throne of Solomon. They make a fine pair, but are poor things apart. Zeal without discretion is a misdirected wild-fire, and dissection without zeal may be called cowardice.—C. H. Spurgeon.
RICHMOND ACADEMY OF MEDICINE AND SURGERY.*

Stated Meeting, June 21, 1892, Mark W. Peyster, M. D., Reporter, pro tem. President Thomas J. Moore, M. D., in the chair.

Edwin P. Turner, M. D., of Richmond, Va., read a paper on "Preservation of the Perineum."

In the discussion to-night it is not my intention to go into the details of causation of ruptures of the perineum, nor to enumerate the many plans of treatment advocated by various authors; but more to bring to the attention of this body a plan for the prevention of this accident, which I have of late adopted. On my part it was the outcome of necessity. Appreciating that a clean cut heals more kindly and readily than a ragged tear, especially in a favorable position, I was induced in the emergency to carry an idea into practical application—a procedure I have had no reason to regret; for it certainly has, in more than one instance, served me well. We are fully aware of the all-importance of an intact perineum for the preservation and continuance of a healthy condition of the pelvic and genital organs of woman. Appreciating this fact as we do, it should be our duty to use every means available and practicable that tends to the welfare of our patients.

The majority of cases, especially multipara, with little attention, generally terminate favorably as far as the perineum is concerned. Of course, it is our duty in every case of accouchement, no matter how simple, to give sufficient attention to this important part, if for nothing more than to have a clear conscience of duty well performed. Other cases, where the parts are more rigid and unyielding, will require more skill and attention. Sometimes, after hard and faithful work, our patient is delivered safely. Then, again, it may be our misfortune that she is torn to a degree ranging from a ruptured fourchette to the destruction of the entire perineal floor.

We have all been taught how the presenting part should be pressed back during a pain, especially when there is danger of rupture, so that the perineum shall have time to gradually stretch and dilate; that we should tend to shove the perineum forward—the perineum resting in the hollow of our hand, while the extended thumb rests upon one side of the vulva and fingers on the other—so that it shall be stretched over the presenting part, thereby helping it to dilate; also that it is preferable, when the perineum is fully dilated, to bring the presenting part forward between the pains and deliver them if possible. There are other plans that I might enumerate. It is well to remember that in vertex presentation it is not always the head, but often the after-coming shoulders which give you trouble. We should guard the parts with care until after the shoulders are delivered.

It is when every method has been tried, and we feel that rupture is imminent, that I would suggest to take either a sharp pair of blunt-pointed scissors, or a blunt-pointed bistoury or hernia knife, and nick on both sides that part of the labia which is most severely stretched, midway between the pubis and the perineum, cutting outward from one half to one inch. Before the cutting the labia is stretched over the presenting part—a thin, web-like membrane, fitting over it like a glove. It is not so readily lacerated as the perineum. After the incision it retracts. We have a larger and more commodious vulvar outlet; the child is born, the perineum saved, and no important parts have been injured. Instead of having a tendency to separate, as does a perineal tear, at every movement of the patient, the severed edges come at once into apposition, seldom needing a stitch, readily healing, leaving the parts in a normal condition, the position of the wounds render them but little liable to septic absorption and infection.

I have treated four cases, all primipare, by the above method with the very best possible result, and am confident, had I pursued a different course, badly lacerated perinei and the bugbear and trouble which attend them would have been my lot. As it is, all four of my patients are enjoying perfect health as far as the perineum and the organs dependent upon it for support are concerned. I throw out this suggestion with the hope that it may help some of you in time of need, and render as faithful service as it has me.

*From Dr. James N. Ellis, Reporter of the Academy of Medicine and Surgery, Richmond, Va.
Dr. George Ben Johnston said that it is common for the obstetrician to encounter cases in which it appears impossible to save the perineum, as it is distended and bulged by the pressure of the down-coming head; and yet at the last moment it may relax, and birth be accomplished without injury to the tissues. For this reason the speaker would hesitate to cut the labia to avert a rupture that is only threatened. If the perineum does tear, by rendering the wound aseptic, stitching immediately, and keeping the knees tied together, repair will take place in nine out of ten cases. In view of these facts we are not justified in adopting so severe a preventive measure. Besides, there is as much danger in cutting the labia, on account of their greater vascularity, as there is from rupture of the perineum, and the opportunity for absorption and septicemia proportionally great. It is best to let nature take its course and repair any damage that may be done. He has tried supporting the perineum and other methods, but has seen tears when not expected, and vice versa.

Dr. Turner, in closing the discussion, reaffirmed his belief in the utility of the operation, and said that he had seen no untoward symptoms from nicking. He would feel that he had neglected an obvious duty if he sat quietly by and permitted nature to take its destructive course.

Dr. Turner reported a case of fracture of the tibia and fibula. In six weeks the latter united, but the former did not. He applied a splint, and permitted the patient to walk with the aid of a crutch, and in four weeks there was perfect union.

Dr. Charles M. Shields saw a man with otitis media, two months ago, with the following history and symptoms: Four years previously there had been rupture of the tympanum of the right ear, with escape of pus, resulting in the abolition of the sense of sound on that side. Two months ago inflammation of the middle ear of the left side occurred, and ran the usual course, the drum rupturing on the evening of the third day, with cessation of pain and temporary restoration of hearing. The following morning, however, the deafness returned, and has continued ever since. This is an uncommon outcome of otitis media, as total deafness never occurs. There is no appreciation of sound, even when the bones of the head are used as a conducting medium. Two days after the rupture chills and fever supervened, supposed at the time to be due to ear trouble, but subsequently thought by Dr. Hugh M. Taylor to be malaria. Neither quinine, phenacetine, or aconite seemed to allay the fever, which continued up to ten days ago. There must have been some anomaly in the division between the internal and middle ear, permitting pus to gain access to the labyrinth before being discharged. Dr. Shields does not think cerebral abscesses are ever due to troubles of the internal ear, but they may occur from inflammation of the mastoid.

Dr. W. W. Parker reported his own case—indigestion with heart trouble. He called attention to a peculiar intermission of the heart's action characterized by a delay of one half the usual time between the second and third beats. Assuming the normal intermission between the heart-beats to be one second, the time between every second and third beat in his case would be one second and a half. Attention to diet, and calomel (which seems to have a soothing sedative effect locally on the gastric mucous membrane) at first afforded relief. At the moment digestion of the contents of the stomach is completed he has to take food, or this peculiar affection of the heart will commence almost immediately. It is attended with great depression, amounting at times to cardialgia. Iron, quinine, and strychnia, when persisted in, seem to afford relief.

Meeting, July 5, 1892.

Mr. Hugh Blair says cholera follows la grippe. Years ago one physician treated it with whisky, camphor, and opium. Another said opium was of no avail, and harmful, as it produces congestion, which trouble is already present. Calomel and ice produce no disturbance, and meet with success. Opium produces death. Calomel was given in large doses, ten grains every hour; but he doesn't think this is the correct way. In old times every thing was given by the stomach, which could not retain any thing. The hypodermic syringe now meets with success.

Cholamine, the slight diarrhea before cholera
proper, is stopped by the use of a good "cholera mixture." Later, calomel prevents collapse and saves the patient. Soothing by the hypodermic syringe is the proper plan, the nervous system being aided by this means. The last time cholera came to Richmond it produced very little effect, as the city was thoroughly limed; but in 1832 the epidemic was worse here than anywhere else. The disease originates in India, goes to Russia, thence across Europe, and then the Atlantic. The scientific cause is the comma bacillus.

Dr. Wm. S. Gordon said the best treatment for cholera infantum or summer complaint of children is morphine hypodermically. Dr. Larabee, of Louisville, pronounces it very successful. It is the only rational treatment, as the stomach retains nothing, and the nervous system bears the brunt of the disease. The disease has the same effect upon infants as cholera morbus has upon adults. The dose of morphine, hypodermically, for cholera infantum should be $\frac{1}{350}$ to $\frac{1}{150}$ grain.

Dr. Wm. Matthews, of Manchester, said that Dr. R. A. Flint, jr., of New York, used hypodermics with success in cases of cholera fifteen years ago. He is uncertain about the dose. Dr. Matthews cleanses the whole bowel, and thinks that colon flushing is a great thing, but is very difficult. He has had a patient for six weeks, the inflammation spreading to the spinal cord, producing fifteen spasms a day. The colon in the case can not be flushed. The catheter passes very easily, but is immediately shot out as if from a gun. In cholera infantum, calomel is the sheet anchor. Afterward he uses intestinal antiseptics, as salol and sulpho-carbolate of zinc; then astringents. In the earlier stage no opium is given, but, in some form, it is demanded on the second or third day. He has met with moderate success. For flushing, borax, or a weak solution of Listerine or chloramine; one half a pint twice a day is sufficient for a child two months old. He has never tried hypodermics of morphine.

Dr. Wm. S. Gordon said that, if given to adults, he did not see why morphine should not be given to infants, the trouble in both being a want of vaso-motor control.

Dr. Thomas J. Moore began by saying that the text-books are wanting in descriptions of cholera infantum per se. Brain trouble is often confounded with the other symptoms. The bromides control this as well if not better than opium, and do not disguise the symptoms. The same organs are involved in it as in cholera morbus, the only difference being a want of nervous development in the infant. The weight of authority is in favor of morphine hypodermically in cholera infantum, the dose being exceedingly minute. He believes it to be proper.

Dr. W. W. Parker said that he has no doubt that the hypodermic use of morphine for children is very good; the only difficulty being the correct dosage. Collapse of cholera infantum should be treated with friction and stimulants, but no opium. So far as Asiatic cholera is concerned he has no fear, if he can see the case in its incipient. He gives calomel with capsicum, and sometimes opium. French brandy is the best remedy. He believes small doses of opium in cholericine to be effective. A drunkard will always die.

Dr. Parker reported the following case of dysentery followed by vocal paralysis. A man, weighing two hundred and fifteen pounds, has been suffering from dysentery, preceded by diarrhea. He was discharged last Sunday. The doctor was sent for the Tuesday following, and found the man almost speechless. He had been asleep for two and a half hours by an open window. Dr. Parker wished to know the cause.

Dr. Mark W. Peyser reported a similar case, occurring in a night watchman while on duty. Speech, in this case, was recovered in a week.

Dr. Parker, continuing his own case of indigestion with heart trouble, reported at the last meeting, said that he had been dieting himself, and now does not suffer, except from irregularity of the heart and excessive fatigue. A week or two ago he could not walk, on account of excessive fatigue ensuing upon the slightest exercise. Iron, strychnine, and quinine in large quantities, and French brandy cured him. After the subsidence of this trouble, eruptions occurred at the root of the nails, and there were stiffness and dryness of the palms of the hands. Last week there was edema of the ankles, par-
particularly the left. Forty years ago there was painless rheumatism of the left knee. The edema was twice as great on the left side, and from the middle of the thigh down there is a sensitive eruption like that of scarlet fever. Bromide of sodium relieved this. There were also present diarrhea, and afterward dysentery. He can now eat what he pleases.

Abstracts and Selections.

Chloralamide as a Remedy for Seasickness.—The British Medical Journal has recently contained some letters from men like Graily Hewitt, Robert Barnes, and Professor Charteris, regarding their professional experience as to attacks of seasickness. The last named writer has a letter in the Journal for June 18th, asking medical attention to a solution containing thirty grains of chloralamide and a like amount of potassium bromide, in an ounce of menstrum; this has thus far been used with advantage by persons who have had to make short voyages, like trips across the Channel, or from Fleetwood to Belfast. This combination is dubbed by the author "chlorobrom." The passenger is recommended to take a podophyllin pill for one or two nights before the date of sailing, and when on board to remain for a time, before rough water is reached, in a horizontal position with eyes shut, and to take no food on short trips. Dr. Charteris has received a letter from a medical man, who made the trip from Leith to Hamburg, wherein the correspondent states that the chlorobrom solution enabled him to stave off his old enemy—seasickness—by going to his berth early and getting a sound sleep, through the influence of the drugs, almost before the vessel got out into rough water. He was not seasick after he awoke, and was able to go to the table every meal, although the boat pitched greatly. On his next trip he avoided taking the medicine and he was very sick. A trip from Glasgow to Shetland was rendered unusually free from nausea and retching by means of small doses of the chlorobrom. The tossing of the steamer was violent enough to wake him up at night several times, but he experienced a few minutes of pleasurable reposeful feeling, which the rolling of the steamer seemed rather to enhance, and then he fell asleep again. A lady on the same trip, who had a like treatment, remarked spontaneously that during her intervals of wakefulness "she enjoyed the rolling of the steamer." When the trip was at an end the patients were exceptionally free from exhaustion and weariness; some of them, in fact, reported themselves as "feeling quite vigorous and refreshed." The dose of chloralamide may be stated for an adult to be from a half dram upward, not exceeding one hundred grains in twenty-four hours. Professor Charteris closes his letter by saying that he has no hesitation in commending the drug to all who contemplate and who dread short and rough sea voyages. Of longer transatlantic excursions he has not yet received details that will justify any sanguine expression. The reports thus far obtained warrant him in affirming that—

"1. This solution is absolutely safe and harmless, and that it produces a refreshing sleep without any baneful after-effects.

"2. When judiciously administered it prevents, and in all cases alleviates seasickness." The effect of the drug may be expected to begin in from thirty to ninety minutes after dosage; and the duration of sleep thus induced will be from five to eight hours. The quality of sleep is said to be refreshing, natural, and devoid of disagreeable sequels in nearly all cases.—Journal American Medical Association.

The Pathology of Addison's Disease.—In respect to the phenomena of Addison's disease and their interpretation the pendulum of pathological opinion is constantly changing its position. Broadly stated, there are two main views of its pathogenic, the one which refers the symptoms to chemical changes, and the other which claims that they may all be explained by nervous disturbance. Although it is clearly wrong to single out from all its symptoms the fact of abnormal pigmentation alone, yet, as that is the most obvious and easily noted in experimental researches, most stress has been laid upon it. As regards this single feature of the affection, the explanation has been offered, on the one hand, of its being due to the retention in the blood of products which the healthy suprarenals destroy, thus establishing a sort of parallelism between this disease and myxedema; there is, on the other hand, no inconsiderable support to the view that pigmentation is under direct nervous control. This latter view is fully stated by Prof. Raymond, in a recent paper, based on a case of lymphadenoma associated with marked melanoderma, but where the suprarenals were unaltered; while the great abdominal ganglia were seriously encroached upon by chronic inflammatory changes. Prof. Raymond believes that in the cutis there are chromatophorus cells which, like those in the frog and chameleon, are under direct nervous control, and that they yield an excess of pigment to the malpighian layer under certain conditions of nerve disorder. Pathological rec-
ords afford many facts in support of this contention, and we need dwell no further upon it. Quite recently, however, some important researches upon the normal suprarenals and the urine in Addison's disease have come to the support of the chemical or humoral doctrine. Dr. F. Marino-Zuco, director of the Chemico-Pharmaceutical Institute of Genoa, has found that normally these organs yield a notable quantity of neurine, which is also eliminated in appreciable amount in the urine in Addison's disease. In a communication by Drs. F. and S. Marino-Zuco, presented to the Academy of the Lincei by Prof. Canazzaro, the subject is carried further. Experiments were first made to establish the physiological importance of the suprarenal capsules, showing that animals in which both these organs were removed did not survive, but when one only had been extirpated the animal survived and increased in weight. From fourteen to twenty-four days after the extirpation of one capsule circular slate-colored patches were observed in the shaven skin, from which sprang tufts of blackish hair of rapid growth. In the next place they tested the action of neurine on animals by injecting two to four cubic centimeters of a solution of 5 in 1,000 into the peritoneal cavity. The daily injection of two cubic centimeters produced no constitutional disturbance, but after six to eight days small slate-colored patches with thicker and darker hairs were visible on the abdomen, and on shaving other parts of the body the same slate-colored patches were visible, increasing day by day. The investigators are pursuing their researches, and believe that they have discovered a clue to the mechanism of the pathogenesis of Addison's disease.—London Lancet.

Radical Cure of Ventral Hernia.—Pitschke (Centralbl. f. Chir., No. 24, 1892) reports a case in which he performed, with good prospects of ultimate success, an operation for the radical cure of a large ventral hernia. The patient, a female, aged sixty-one, presented a swelling which reached from the lower third of the abdomen on the right side almost to the knees. This was a hernial protrusion, containing readily reducible intestine and omentum. The mouth of the sac, measuring about 6 inches in diameter, was situated a little below the level of the antero-superior spines of the ilium. The coverings of the hernia consisted of attenuated skin and muscle, which, after reduction of the contents of the sac, formed large dependent folds. There were also two inguinal herniae—a large one on the left side, which necessitated the wearing of a truss, and a smaller one in the right groin, which came down only after reduction of the ventral hernia. The large central swelling had existed for about three years. It had first increased in size slowly; but after a time, in consequence of violent muscular exertion, suddenly enlarged, and subsequently continued to descend with greater rapidity. The patient could not tolerate the pressure of a truss on this hernia, which, as it increased in size, became more and more irksome. The frequently-renewed contact of urine and fecal matter caused a painful and obstinate excoration of the skin on the lateral and posterior surfaces of the swelling, which, together with the weight of the hernia and its protrusion between the thighs, led the patient to seek urgently for surgical relief. After reduction of the contents of the hernia, a long incision, which exposed the interior of the sac, was carried through the abdominal wall from above, downward, and inward as far as the greater labium on the right side. The thick and strong peritoneal wall of the sac was then dissected away from the superjacent soft parts, during which stage of the operation the intestines were retained within the abdomen, and guarded by a large pad of antiseptic gauze. The dissection was carried as far as the mouth of the sac, and the portion of peritoneum forming the neck then constricted by silver wire. After this the body of the sac was excised, and the free margins of the stump were brought together by catgut sutures. It was found impossible to bring together the thin fibrous and muscular margins of the opening in the abdominal wall. The surrounding structures, however, and the edges of the wound on the skin were closely applied by numerous sutures. During the first three days after the operation the patient suffered much from frequent vomiting, with obstinate constipation, which excited a suspicion of intestinal obstruction. These disquieting symptoms ceased after the administration of a copious enema, and the patient subsequently made a good and uninterrupted recovery. The wound healed by primary intention, and when the woman was last seen by the author, twelve months later, there was complete freedom from ventral hernia, and absence of any protrusion, even on coughing, at the seat of the operation.—British Medical Journal.

Diuretin.—Professor Demme, in a clinical report of the Berne Children's Hospital, mentions that he has successfully employed the so-called diuretin or salicylate of theobromine and sodium in several cases of dropsy, in which calomel and hot baths did not seem suitable, and where ordinary diuretics had not proved beneficial. He finds that it may be regarded as a safe drug for children above a year old, and one
that is quite free from unpleasant effects. He believes the diuretic effect is occasioned mainly by action on the renal epithelium. In scarlatinal nephritis, severe dropsy coming on after the acute stage of nephritis is more easily reduced by diuretin than by any other means. In cases of mitral insufficiency, with insufficient compensation, ascites and anasarca are best combated with the help of diuretin after the compensatory disturbance has been reduced by digitalis. As to dosage, children from two to five years of age may be ordered from eight to twenty-five grains during the day, and children of from six to ten years as much as from twenty-five to forty-five grains, in divided doses of course. The total amount for the day is generally dissolved in four ounces of water, with ten or twelve drops of brandy and forty grains of sugar. In some cases the administration was continued for some weeks without any signs of either a cumulative action or of diminished therapeutic effect being seen. In one of the cases of scarlatinal dropsy, of which details are given, the effect of diuretin was very striking. While the child was on acetate of ammonia the urine amounted to only nine or ten ounces a day, and contained 0.15 per cent albumen, according to Esbach's scheme of measurement, with a considerable number of granular casts and epithelium undergoing fatty degeneration. The change of treatment produced an immediate effect, the urine in the three days amounting to nearly three times the quantity previously measured, and containing only half the former quantity of albumen, with very few casts, and in a week neither albumen nor casts could be found.

_Bulbar Paralysis._—Hoppe (Berl. klin. Woch., April 4, 1892) says that there are a number of cases which clinically have a close relation to bulbar paralysis, but the minutest examination fails to find any lesion after death. Of such a character is the following case: A man, aged forty, with no history of syphilis, began to suffer three weeks before admission from difficulty of swallowing and drooping of the eyelids. Shortly afterward the speech became nasal. The tongue was found on admission to be unaffected, and there was no laryngeal paralysis. The pupil reacted normally. There was no paralysis in the limbs. He went out considerably improved. He was readmitted eight months later. He had gradually become worse, and now he had much difficulty in swallowing, speaking, or chewing. The palate was paralyzed; the abductors of the larynx were also paralyzed; there was also weakness in the arms. There was paresis, especially on the left side. The pulse was rapid. A few days later there was complete inability to swallow, and later death occurred. On careful examination, both with the naked eye and the microscope, nothing abnormal was found in the central nervous system (including the cerebral cortex) except a fresh hemorrhage into the oculo-motor center. This hemorrhage had taken place quite shortly before death, as the unaltered blood cells showed.

The author then gives the details of three such reported cases, where nothing was found after death. He would look upon them as belonging to a distinct group of disease, characterized by a motor paresis especially affecting the cranial nerves, progressing slowly and in some regions ending in complete paralysis, but without atrophy or altered electric reaction. The two latter facts, as well as the involvement of the upper face muscles and oculo-motor nerve, the infrequent affection of the hypoglossal nerve, the distinct remissions and change in symptoms perhaps in a single day, and the negative necropsy distinguish it from ordinary bulbar palsy. The disease is certainly not hysterical in nature, nor yet peripheral in origin. It does not belong to the group described by Erb, and characterized by paresis, weakness of the muscles of mastication and of the neck, and secondarily paresis of the tongue and extremities, difficulty of swallowing and involvement of the upper part of the face, for here there was wasting. The author suggests that it may be due to an intoxication or to some undiscovered lesion in the cerebral cortex.—_British Medical Journal._

**The Treatment of Epilepsy.—Dr. Guy Hinsdale has shown from his clinical observations that potassium bromate shares with the bromides the power of controlling epileptic seizures, but it is an irritant intestinal poison, lowering the pulse and depressing the heart to such a degree that in most instances it had to be abandoned. Magnesium bromide exerted an undoubted power in controlling the attacks, both as to frequency and severity; there was, however, apparently a greater liability to facial eruption than in the case of potassium or sodium bromide, and Fowler's solution of arsenic was usually given in addition. Hydrobromic acid was fairly successful. It is not likely to cause acne nor muscular depression, and in some cases it is usefully added to lessen doses of alkaline bromides. Certainly, in some instances, it does aid digestion, or at least has no tendency to impair that function. The use of nitro-glycerin has not been sufficiently encouraging to insure its continuance. In some cases, when the improvement was most striking at first, the attacks soon returned, and**
the remedy had to be abandoned. Nitrite of potassium proved too depressing, and produced marked cardiac irritability. Antifebrin succeeded in keeping the attacks, in one case in which the bromides had failed, down to such a number that life was useful, but usually only temporary improvement was noted, and in a few weeks it was necessary to return to the bromides. Sulphonal was used in several cases with more or less unsatisfactory results, and appears to answer admirably as a substitute when the bromides have to be discontinued on account of bromism or other disagreeable complications. He has used sodium biborate, lithium biborate, tincture of cannabis indica, tincture of digitalis, ammoniated copper, and antipyrin, but none of these remedies maintained themselves. He has fallen back, then, upon the bromides of sodium, potassium, and lithium, employing most frequently the sodium salt, which is well borne for long periods, when arsenic is used occasionally to check cutaneous disturbances.—International Medical Magazine; Amer. Jour. Med. Sciences.

Placenta Previa : Suppuration of the Symphysis Pubis: Recovery. — Lennander (Centralbl. f. Gynäk., No. 24, 1892) read this case before the Medical Society of Upsala. The patient had already borne two strong children, the labors being natural. Placenta previa lateralis was diagnosed. When the os was well dilated and membranes still unruptured, one foot was seized and turning performed. Delivery of the arms was difficult and the right clavicle was fractured. The head was easily extracted. The child, born asphyxiated, was soon revived; it weighed over 7½ pounds. The mother became feverish directly after delivery, the temperature rising to 105.5°. Three weeks later a large abscess, which pointed below the left gluteus maximus, was observed. Eight days later a yet larger abscess over the symphysis was laid open. The osa pubis lay wide apart, and necrosed sequestra, bony and cartilaginous, were removed. Three months after delivery the patient was discharged cured. A year later the patient was in good health. The symphysis was firmly united; she could get on to a chair and jump off it without pain or difficulty.—British Medical Journal.

Solamine.—Dr. Ch. Eloy calls attention to the recent paper of Desnos and to the fact that this is not at all a new remedy, but since its discovery by Desfosses in 1820 it has been the subject of study by Majendie, Husemann, and others. Formula, C₇H₇NO₃₇, crystalline, of bitter taste, insoluble in water, slightly soluble in alcohol; these characters are indeed well known. It is useful as a sedative of both the sensory and of the motor system. It has been used to combat the trembling in sclerosis en plaques, in tic douloureux, paralysis agitans, and post-hemiplegic hemi-athetosis. It is supposed to be a moderator of the motor excitation of the bulbo-medullary center, of the lateral column, and of the pyramidal tract. It has been unsuccessfully administered in whooping cough. Of late it has been recommended in the pains of dyspepsia, in gastralgia, in the pains of alcoholic gastritis, in gastric ulcer, and to avoid in certain susceptible classes the dangers of the morphine habit. The dose is from one to six grains per day in wafers, pills, or mucilage. In spite of the enthusiasm of recent writers it is not likely that this remedy will come into extended use, because the place which it would seem that it should occupy is already filled by reliable remedies.—Revue Générale de Clinique et de Thérapeutique; American Journal Med. Sciences.

Hematoporphyrinuria. — Sobernheim, in Deut. med. Woch., June 16, 1892, says that the chemical properties of this iron-free hematin (hematoporphyrin) are as yet hardly sufficiently established, but that it has been found on several occasions in strikingly red-brown urines. He reports a case in a boy, aged thirteen, suffering from enteric fever. In an early stage of the disease the urine was of reddish to blackish-brown color. It contained no albumen, no bile pigment, and no blood cells. It did not give Heller's reaction. A solution of the coloring matter after extraction, as well as the urine itself, yielded the two characteristic spectroscope absorption bands. Hitherto hematoporphyrinuria has only been described after the use of sulphonal, as in the case of sulphonal poisoning reported by Kober (Epitome, April 2, 1892, par. 299). In the above-named case neither sulphonal nor any like drug had been employed. It was thought that the hematoporphyrinuria had as its cause a hematoma of the rectus abdominis muscle which appeared shortly before the boy's illness, for the pigment was first noted during the absorption of this hematoma. The pigment, however, again appeared in the urine shortly before the patient's discharge, and it was ascertained that on several occasions during the past year the urine had presented similar changes. It was a sort of chronic hematoporphyrinuria. The author concludes that hematoporphyrin itself exercises no deleterious effects, but that the severity of recorded cases has been due to the sulphonal intoxication, of which the hematoporphyrinuria was only a part manifestation.—British Medical Journal.
Codeine Sulphate.—Mr. Joseph W. England makes mention of the fact that this remedy is an extremely prompt sedative in affections of the respiratory tract, possessing an advantage over morphine in that it does not check the secretions, nor does it lead to a habit, nor has it disagreeable after-effects. It will indeed alleviate pain. The dose varies from one eighth to one half, and exceptionally, one grain, given in pill or in solution, frequently in syrup of wild cherry. The official alkaloid is rarely used, the sulphate being more frequently prescribed. If administered in water an insoluble residue is sometimes found, which, on examination, was proved to be the alkaloid codeine found in codeine sulphate from the excessive heat employed in the concentration of the solution for cry-tallization.—American Journal of Pharmacy; American Journal Med. Sciences.

Auto-infection in Cancer.—0. Hamburger (Med. chir. Rundschau, No. 12, 1892) reports the following case: A woman, aged fifty, had had a tumor on the left labium minus for two years, during which it had grown to a considerable size. Superficial ulceration then took place, very offensive pus being discharged. Soon after the growth began to ulcerate small wart exccesences appeared on the part of the right labium minus, which was in contact with the left. These warts soon ulcerated, and on removing the growths on both sides they were found to belong to the category of flat-celled epitheloma.—British Medical Journal.

Exploratory Vaginal Incision for Pelvic Suppuration.—Routier (Rev. de Chir., May, 1892) read a paper at the recent meeting of the Congrès Français Chirurgie, in which he condemned the too free removal of the uterine appendages, so much in vogue in cases of pelvic suppuration. Still more did he object to vaginal hysterectomy for the same affection. This operation done by morcellement, maimed the patient at once, and left her life for hours at the mercy of pressure forces. Routier has long been accustomed to open Douglas' pouch and to drain through the vagina in cases of collections of pus or blood in the pouch. He finds that the appendages can readily be explored through the incision made in the posterior vaginal fornix. He has often practiced this method of exploration, and found that in many cases the simple incision suffices; sometimes abdominal section is needed after all; and lastly, vaginal hysterectomy may prove the more advisable operation. In that case Routier does not perform morcellement, but bisects the uterus by a median antero-posterior incision, removing each half separately. By this method there is little danger of serious hemorrhage. Each half of the uterus is easily depressed, and with it the corresponding appendages are drawn out without difficulty and safely removed. Routier has succeeded in all the sixteen cases where he has operated in this manner. In three there were multiple fistulas, and other old and intractable lesions.—Ibid.

The Treatment of Basedow's Disease.—Dr. F. Deléage, for the paroxysms of oppression and palpitation, applies ice to the precordial region, and administers digitalis, two and a half grains of the dried leaves, every half hour for two or three hours. If relief is not obtained before the expiration of three hours, a phlebotomy is indicated. Mentioning the treatment as proposed by Cheadle—tincture of iodide internally, the three bromides, digitalis, belladonna; by Sé—veratum viride, hydrotherapy, electricity; by Dieulafoy—ipecac, digitalis, and opium; he states that the last method seems to yield very satisfactory results. One half grain of powdered ipecac, one third of a grain of powdered leaves of digitalis, and one sixth of a grain of extract of opium for each pill, of which the daily dosage is four to six. The improvement is usually rapid, the only inconvenience being a diarrhoea.—Revue de Thérapeutique Générale et Thermale; Amer. Jour. Med. Sciences.

Strontium Lactate in Tenia.—Laborde (Journal de Med. de Paris) has had excellent results in tenia with the usual dietary care from the following:

| Strontii lact. (Paraf-Javal) |ICTURE | Agt. | Glycerin. | M. S. 12 teaspoonfuls every morning for five days.

This is practically the same strength as the standard solutions of stront. lact. (Paraf-Javal) used so largely in albuminuria.—Med. Standard.

Actea Racemosa in Dysmenorrhea and Ovarian Irritation.—Mr. James Brunton uses this remedy in twenty to thirty minims doses, three daily, for four days previous to the usual time of the appearance of the flow. It is supposed to have an anodyne action upon the dysmenorrhea, whether of uterine or ovarian origin, and in certain cases of metrorrhagia it can replace ergot to advantage. In amenorrhea of early girlhood it is of benefit when combined with iron. As an anodyne it can replace the bromides and opiumes. In metrorrhagia and metrorrhagia it is beneficial as a regulating agent, although at times it is disappointing.—The Practitioner; Amer. Jour. Med. Sciences.
THE AMERICAN PRACTITIONER AND NEWS.

"NEC TENUI PENNA."

Vol. 14. SATURDAY, AUGUST 13, 1892. No. 4

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A Journal of Medicine and Surgery, published every other Saturday. Price $3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

Books for review, and all communications relating to the columns of the journal, should be addressed to the Editors of THE AMERICAN PRACTITIONER AND NEWS, Louisville, Ky.

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THE CIGARETTE EPIDEMIC.

"Our national legislators still find time occasionally to attend to the public health. A report severely condemning cigarettes has been made to the Senate by the Committee on Epidemic Diseases. The committee does not believe that the Federal Government can do much about it, except perhaps to forbid their importation and prevent their manufacture in the District of Columbia."

So says our esteemed contemporary the Boston Medical and Surgical Journal. So much has been said and written about the evils of cigarette smoking that public opinion is warped from the real issue in the question, and public reformers are in danger of making themselves ridiculous by seeking to influence legislation against a great evil, 'tis true, but inadequately, since such legislation touches only one, and that an insignificant phase of it.

If statistics could be had on the evils of the tobacco habit it is more than doubtful if they would show any more harm done by little rolls of tobacco wrapped in paper than is done by bigger rolls of the same wrapped in tobacco; nor do we believe that either or both could be shown to be more hurtful than that supersaturation of the economy which results from the almost universal habit of chewing tobacco. Tobacco is not in any true sense a source of wealth. For, say what the cau-ists may, its habitual use in any form as a sedative or exhilarant is to the hurt of the system more or less, according to the strength or constitution of the habitué. Dyspeptic troubles incident to the tobacco habit are well known to the physician, while the tobacco heart is as much a fact in pathology as dilatation or any valvular lesion.

It is not a strained statement to say that the way is paved to avoidable disease and premature death by a very large number of men through the indulgence of their love for tobacco.

It is against the habitual use of tobacco, in cigar, cigarette, pipe, or quid, that these reformers should direct their efforts, for this is truly one of the major evils of the time.

Surely to one who has visited our National Houses of Representatives and witnessed the spurs and sluices of amblier that shot from between the lips or trickled from the corners of the mouths of most of the patriots present, when that one knew that eight out of ten of these tobacco-stained representatives of a tobacco-poisoned constituency would on going into the committee-rooms or hotels, solace themselves further with cigars, pipes, and cigarettes, a bill to suppress the minor arm of the evil would seem most absurdly ridiculous. Tobacco can no more be legislated out of use than can alcohol. It is only by moral evolution through education that men can be persuaded to avoid pleasures which compromise health. The doctor may prove a great educator in this line; but, alas, in the matter of tobacco chewing and smoking only a small percentage of the teachers would be able to add the force of example to hygienic dictum.

IS VACCINIA MODIFIED VARIOLA?

Since Jenner's day the doctrine that vaccinia and variola were one and the same disease, manifesting itself in widely different degrees of severity, has been moot. The English, following the lead of Jenner and his disciples, maintained that the diseases were interchangeable, while the French, in the absence of satisfactory experimental testimony to the point, held the opposite view.
Of course a good argument could always be made for identity on a priori and analogical grounds; while the doings of Pasteur in attenuating the virus of rabies and anthrax gave it great support; but it would seem that not till very recently has anything like a conclusive experiment been successful in the case.

Here we have something positive. The Boston Medical and Surgical Journal of the 4th instant contains the following:

Dr. Thomas W. Hime, of Bradford, England, gives, in a recent issue of the British Medical Journal, an account of experiments which tend to show that a calf can be inoculated with fresh, variolous lymph and, without exhibiting any reaction at the point of inoculation, undergo a fever and a discrete eruption fairly typical of variola in man of a mild grade. Furthermore, that man and beast alike inoculated with lymph from the quasi-variolous calf develop vaccinia and not smallpox. Three other calves and one man in succession were inoculated, and all exhibited a typical vaccinia. Several people, seven in all, were vaccinated from the first calf which exhibited vaccine signs, and all underwent the characteristic appearances of vaccination. Hime attributes his success to the fact that in the experiment he used a calf instead of an adult heifer as others had done.

Notes and Queries.

A Memory for Figures.—A man who presents an extraordinary example of the extreme development of a partial, special, or, as it has sometimes been called, local memory, has recently been reported upon by a special commission of the Académie des Sciences. The case unfortunately does not throw any light upon the mode of origin of such memories, since the facts that can be ascertained as to the ancestors or near relatives of the subject do not afford any evidence of the operation of a hereditary tendency, but the examination has yielded some results of great interest.

Jacques Inaudi, the son of Piedmontese peasants, was born in 1867, and did not learn to read and write until twenty years of age. Yet when only twelve years old he was already a calculating wonder, and was presented to the Société d'Anthropologie by Broca, who in his report wrote: "He can not read nor write; he has the numbers in his head, but can not write them." He learned the numbers from his brother by repeating them after him, and has worked out for himself methods of resolving arithmetical problems which are original with him, and differ in certain points from those in ordinary use. Thus, in addition, he can add together six numbers of four or five figures each; he achieves this by adding together the first two, then the sum of these and the third number, and so on to the end; but in each case he begins from the left, as is stated to be the practice of the Hindoos. In subtraction he accomplishes the extraordinary task of subtracting numbers containing twenty figures, beginning here also from the left. This feat is a striking proof of his wonderful memory for numbers, and his method of multiplication depends entirely upon the same faculty. Thus, he multiplies 384 x 36 by the following process: 800 x 30 = 24,000, 800 x 6 = 4,800, 30 x 36 = 1,080, 4 x 36 = 144, which gives by addition the true total, 30,024. Division he accomplishes in the same way as an arithmometer, by successive subtractions. In finding a square root, however, he adopts another method; that is to say, he makes a series of guesses until he finds the true root. All these calculations he makes with extraordinary rapidity; for example, he gave the cube of 27 in less than six seconds.

When the attempt was made to ascertain by what mental process Inaudi achieved his feats, it was soon evident that he possessed an extraordinary power of retaining figures in his memory. He can repeat a number containing 25 to 30 figures which is read out to him, and retain it in his memory for some time. In one instance he remembered a number containing 22 figures for a week, although he was not warned that he would be asked for it again. He can repeat the number forward or backward, or can give any section of it, as, for instance, the billions and millions. At the end of a séance he can repeat all the figures which have been mentioned to the number of 400.

Though he has this prodigious memory for numbers, his memory is not remarkable in other directions. He can not reproduce more than five or six words heard once, and after a single hearing can not repeat two lines of poetry or prose. His memory for color, form, events, places, and melodies is rather inferior to the average, and he is unable to understand how any person can play blindfold chess.
This last observation brings us to the point of greatest physiological interest in Inaudi's case. All other known calculating prodigies have had a visual picture of the numbers with which they were dealing, and the calculator Bidder even stated that he could not conceive the possibility of mental calculations without the power of representing to oneself the figures as though they could be seen. Mr. Francis Galton, by inquiries among accountants and other persons much engaged in calculations, ascertained that this power of calling up a mental picture is commonly possessed by them to some degree, and that often the figures are disposed in certain lines or groups peculiar to the individual. Inaudi has no such power. "I do not see the figures," he informed the Commission. "I may even say that I have much more difficulty in recalling numbers and figures when they are written than when they are spoken." The Commissioners satisfied themselves that "Inaudi calculates with greater ease when the problem is put to him by word of mouth than when it is placed before him in writing; the sight of the figures embarrasses him, and, reverting to the procedure natural to him, he repeats to himself, either aloud or in a low voice, the numbers which he wishes to retain in his memory."

Inaudi apparently always repeats over to himself the number upon which he is at work, and while the calculation is in process he is mumbling to himself. As M. Charcot points out, his memory might be a memory of sounds or the memory of the movements of articulation, or a combination. No means of answering the question thus raised has been devised, but Inaudi himself is confident that it is the auditory memory upon which he depends, and M. Charcot believes that the memory of movement, if it plays any part, has only a very subsidiary part in reinforcing the auditory phenomenon, which in any case are the first in time.

It will be seen, therefore, that Inaudi's powers of mental calculation depend entirely upon an extraordinary memory for numbers heard, therein differing from other calculators who remember numbers seen. The distinction will be well perceived by inspecting such a number, as, for instance, 436,729,342,687, and comparing the mental impression or image with that produced by repeating aloud four hundred and thirty-six billions, seven hundred and twenty-nine millions, three hundred and forty-two thousand, six hundred and eighty-seven. Probably Inaudi's auditory memory will appear to most people far more surprising than the visual memory of other calculators. This peculiarity is, no doubt, to be traced to the fact that until he was twenty years of age he knew numbers only by hearing and not by sight. It is interesting to speculate whether the growth of this memory would not, in fact, have been checked by early education, especially early instruction in reading and writing. Certain it is that among primitive peoples the memory for spoken words must have been very much more highly developed than is commonly the case among the civilized reading and writing folk of the present day.—British Medical Journal.

GOLD CURE SPECIFIC.—The notoriety of this empiricism is rather a sad reflection on the general intelligence of the public, and also of many so-called physicians.

Charlatanism managed with psychological skill, assuming some discovery in science that is a rational possibility, and covering up the real motives, is always attractive to the credulous and non-experts. But when it boldly proclaims theories outside the range of science and common sense, to be accepted entirely on faith, and the whole supported upon a great pecuniary scheme to enrich the authors, it is difficult to understand how it should receive any serious attention. Compared with other empiric schemes, the bichloride of gold is very inferior in methods of management and assumed reality. It is the same old quackery, bold, ignorant, and dogmatic, without a single original feature. The wild hysterical claims of cure by those who have used the secret remedy is the same old story that is heard after every church and temperance revival. This posing as cured men by this or that means, with certificates from clergymen and others, is common history in every community. It is a curious fact that mystery and concealment should add to its popularity, and still more unexplainable that both pulpit and press should be caught by
such means. It is not strange that inebriates who have received benefit from the treatment should become enthusiastic as defenders of its merits, particularly when it is a pecuniary object to do so. The rapid growth of branch institutions for the treatment is purely commercial. They are managed in nearly all cases by so-called cured men. Precisely what the secret remedy is, used under the skin, and other means are of no interest except psychologically and as phases of the evolution of the drink evil.

The success of the author financially in this country has developed the same boldness to conquer "other worlds." But, unfortunately, he assumed that entrance into societies and scientific support was a merchantable thing, to be bought. Also that the medical, as well as the secular press, was governed by public opinion, and ready to sell out when the price was offered. This was the "Waterloo for Keeleys" abroad. The British Medical Journal, the London Lancet, the Medical Press, and several of our large dailies have denounced the whole scheme as the boldest quackery that has appeared for a long time. In the mean time, a house has been opened in London for the cure of inebriates, and the secret remedy offered for sale. An analysis of the remedy has been made and found to contain no gold, but 27½ per cent of absolute alcohol; and this statement is not denied by the managers of the cure. The Berlin authorities refused to permit a branch institution to be opened in Prussia, unless the remedy was first submitted to the public chemist for analysis. In all this the gold-cure managers have displayed stupidity rarely seen among the common quacks. No attempts have been made to cover up the real pecuniary objects of enlisting capital and organizing companies for the sale of rights and remedies as a matter of great profit. This combination of charity, business, and science is new to our English relatives, and of course rejected. There is one feature of this gold-cure specific worthy of study, that is the hurry and dash of the movement. Doing its work in three or four weeks, sending out the patient inflated with an idea of permanent cure, filled with extravagant expectations and hope, and receiving full pay for this operation. This shows rare skill and full recognition of the brevity of this movement. The bichloride of gold will soon be among the things of the past, and also be a source of wonderment how it could grow and attract attention in this materialistic age.—Journal American Medical Association.

A Bacillus as a Farmer's Friend.—An opportunity for testing Loeffler's method for destroying mice in large numbers, through the agency of bacillus typhni murium, was presented by the recent plague of field mice in Thessaly, in the course of which an entire field of corn was sometimes destroyed in a single night; the harvest was at one time endangered. The bacillus had been shown to be pathogenic for mice of the species arvicola arvalis, and the field mice in question belonged to an allied species. Preliminary experiment showed that the bacillus was fatal to these also. It was further found that the animals eat readily bread impregnated with fluid containing the organisms, and, though well supplied with suitable food, consumed portions of the bodies of their fellow mice which had succumbed. The bacillus grows well upon a decoction of oats or barley, to which peptone (1 per cent) and grape sugar (½ per cent) have been added. Culture fluid of this composition was made in quantity, and tubes of agar containing pure cultures of the bacillus were prepared. The practical measures adopted against the plague were as follows:

In the first place it was proved that the bacillus was harmless to all the domestic animals kept in the affected districts and to man. A quantity of culture medium was poured into a vessel, and to this the contents of some of the agar tubes were added. Peasants were caused to come in from the affected districts, each bringing a basket of broken bread. The bread was soaked in the inoculated fluid and the men dismissed, with instructions to place in each mouse hole a portion of the bread. As a further measure, numbers of mice were inoculated subcutaneously with pure culture of the bacillus, and then set free. Within nine days a notable decrease in the ravages caused by the mice was observed, and from this time onward dead and dying mice were found in increasing numbers. The final results, at the expiration
of four weeks, were received in due course, and proved entirely satisfactory. It seemed, indeed, clear that the measures adopted had saved the harvest.—*British Medical Journal.*

**ONE OF MEDICINE'S FORGOTTEN WORTHIES.**

How inadequately the historian of medicine has acquitted himself of his task is impressed upon us from time to time by the publication of monographs vindicating from neglect or oblivion the good work achieved in their day and generation by inquirers, who found in the promotion of science their one pleasure and their one reward. Italians have animadverted, with something of bitterness on the postponement of their medical pioneers to those of other countries in the apportionment of honor won in physiological and pathological fields, and they have certainly made good the claims of not a few of their compatriots to a far higher place in "the order of merit" than history has hitherto vouchsafed them. A monograph of the kind referred to has just appeared, its author being Dr. Callandruccio, and its title "Agostino Bassi di Lodi, il Fondatore della Teoria Parassitaria e delle Cure Parassitiche" (Augustine Bassi of Lodi, Founder of the Parasitic Theory and of the Modes of Curing Parasitic Disease). Bassi's own countrymen had almost forgotten him; but that, as a true precursor of Cohn, of Pasteur, and of Koch, he was a man of powerful inductive sense and far ahead of his times has, we think, been demonstrated by Dr. Callandruccio's work. He was born not far from Lodi, in the Æmilia, in 1773, matriculated at the University of Pavia, and, under that prince of physiologists, Spallanzani, devoted himself to mastering the scientific bases of medicine. An affection of the eyes caused him to make agriculture the business of his life, but without much success, blindness of a peculiarly hopeless character having supervened. But he did not abate one iota of his interest in pathological pursuits, and so utilized the opportunities that his short-lived powers of vision had allowed him that, in the true scientific sense, he saw what later observers were able to verify in much more favorable circumstances, the findings of the microscope included. His agricultural occupations had interested him in silkworm disease, and that peculiar phase of it known as "il calcino" engaged his earliest consideration. Having endeavored in a multitude of ways to trace it to its cause, he tried to reproduce its characteristic forms, on the hypothesis that it developed spontaneously. Nothing daunted by repeated failure, he continued his experiments and his investigations till, after nineteen years of labor and expense, he satisfied himself that he had tracked the phenomenon to its source. He published a book on the subject, and showed that "il calcino" does not spring into being spontaneously; that it is contagious; and that the principle of the contagium continues to propagate itself on the dead body of the silkworm; that the medium of contagion may be by ingrafting or by appropriate aliments or by contact itself—all of which he reinforced by experiments going to prove that the germs of the disease may be diffused by the atmosphere. The cause of the malady he defined to be a living vegetable organism, a fungus, in short, whose seeds, penetrating into the silkworm, or into other insects, develop, increase, and give origin to other plants, these thereafter assuming in their *ensemble* that efflorescence to which "il calcino" owes its name. Bassi describes in their diverse phases these "vegetabili minutissimi," and the conditions most favorable to their development, such as humidity, moderate heat, and the like; and then he shows step by step how the parasitic fungus attacks the silkworms and how it multiplies itself with a fecundity quite marvelous. In view, moreover, of the readiness with which the disease may spread from locality to locality by means of these very minute germs, he proceeds to recommend modes of disinfection, among which he instances the frequent cleansing and the isolation of the *locules* of the silkworm industry; after which he advises recourse to alcohol, to boiling water, to lixiviated caustic potash, and such means of destroying the germs. This truly epoch-making work the blind, or all but blind, Bassi followed up by others in which actual research is more than replaced by acute reasoning in reply to his numerous critics. He admits a quasi-spontaneity of generation in "il calcino," which he explains as due to a pre-existence of germs
which the living forms have stored up within themselves, and which in certain circumstances may develop and give rise to the disease. Bassi, moreover, anticipated the "cultures" of the bacteriologist, and from his special studies on "il calcino" he convinced himself that further knowledge in the same field will clear up marvellously the theory of contagion in general. In his latest works (1846-53) he demonstrates that all the phenomena presented by contagious maladies find their explanation in the "ipotei parasittarini" (the parasitic hypothesis), and contends that not only plague, smallpox, and rinderpest might be produced by "esserì parasiti vegetali o animalì" (parasitic beings, vegetable or animal), but besides that wounds might be kept up by such parasites, of which gangrene may be regarded as a consequence. To combat these parasites Bassi counsels a recourse to fire, to boiling water, to acids, to sulphur, to the salts of mercury, and recommends as a disinfecting implement the needle with which Italian children are inoculated with vaccine lymph. All which, it will be admitted, discloses an intellect much in advance of his time, justifying Dr. Calandruecio in his closing remarks: "Even the parasitic doctrine, like many other branches of the knowable (scibile) has had its cradle in our Italy. With us it has had its origin and its growth, while foreigners have only facilitated its wonderful acceptance and diffusion."—London Lancet.

The Late Dr. Robert McDonnell, F.R.S. On Friday, July 8th, a large company assembled at the Royal College of Surgeons, Dublin, on the invitation of the President, Mr. Edward Hamilton, to witness the unveiling of a portrait and a bust of the late Dr. Robert McDonnell. His Excellency Lord Zetland was received by the President and Council, who wore their official robes. Sir John Banks, K.C.B., on the part of the subscribers, gave a short address, in the course of which he said that Dr. McDonnell was descended from a long line of ancestors, many of whom were distinguished in the paths of peace and others in the stormy strife of war in the troublous times in their native land of Scotland, and subsequently in Ireland, the land of their adoption. After referring to his early services during the Crimea war, Sir John Banks observed that, once launched in practice in Dublin, he rapidly rose in the estimation of the public, and filled every place of distinction which his own profession could confer on him. His name and fame were not confined within the limits of his native land. He received, for original researches, the coveted and highly-prized Fellowship of the Royal Society. In the plenitude of his mental vigor and in apparent health he was suddenly stricken down by the hand of death at a time of life when it might be supposed years of usefulness were reserved for him. The voice of the profession and the public called for a recognition by the State of his high position. His Excellency then unveiled the portrait and bust, and made a short, appreciative address. The portrait is by Miss Sara Purser, and the bust by Mr. Bruce Joy, and each artist has succeeded in producing an admirable work.—British Medical Journal.

Nickel Carbon-Oxide.—Ludwig Mond reports a remarkable compound of nickel discovered by him. When that metal is exposed to the action of carbonous oxide gas at ordinary temperature the metal is acted on and converted into a volatile compound; very unstable and explosive. On exposing a heated body to it there is a deposition of pure nickel. When injected into the circulation of an animal, the bodily temperature is lowered in a marked manner. Other singular properties are said to be possessed by this newly discovered substance, which is already in the hands of physiologists for purposes of confirming former and of making new observations.

As Bromide of Strontium seems to be destined to displace the bromide of potassium. We would specially recommend our readers to insist on having the chemically pure salts (Paraf-Javal) dispensed, or the standard solutions (5j to the fluid ounce), so as to avoid further accidents, as we learn that toxic effects have been caused by the dispensing of impure strontium salts, the poisonous barium being a concomitant of the strontium preparations of commerce.—St. Louis Clinique.
ON ANESTHESIA FROM ETHER: *
Being Deductions from a Personal Experience of
over Five Hundred Cases given in St. Cath-
erine Hospital, Brooklyn, Harlem Hos-
pital, New York City, and in
Private Practice.

BY JAMES W. GUEST, M. D.

The first few successful cases of ether-
ation are apt to produce a feeling of safety for
succeeding ones, but the more one is engaged
in the daily administration of ether the more
cautious and painstaking he will of necessity
become.

There are very few cases exactly alike. The
marked differences and peculiarities become a
frequent lesson to a careful and observant ad-
ministrator.

The differences are best observed in the fol-
lowing conditions of life:
1. Age.
2. Sex.
3. Size.
4. Temperament or education.
5. Health.
6. Disease.
1. Age. The older the subjects, save in
infancy and early childhood, the harder is it for
them to take and bear ether well as a rule.
They have lost the vigor of early life, conse-
quently have a diminished respiratory resis-
tance, which is the essential point in a good and
a safe etherization.

* Read at the Thirty-seventh Annual Meeting of the Ken-
tucky State Medical Society, May, 1892.

The older the person the more pronounced
the tendency to bronchitis, asthma, cardiac or
renal lesions, every one of which adds to early
and serious complications.

The explanation, probably, that old people
bear an anesthetic better than the middle aged
is, that the proportion given is far less, and it
is given with more care and precaution because
they are old. With the above facts it would
make statistics appear better.

2. Sex. There is no question but that women
take and bear ether better than men, and that
a less quantity will produce the same degree of
anesthesia. This is explained by their being
less full-blooded and less fleshy about the neck
as a rule, and, most important, less given to
alcoholism. Alcoholics are "bug-bears" to an-
esthetists, and never have a typical anesthesia.
The difficulty with which they are anesthe-
tized is in a direct proportion to the amount of
whisky they have imbibed, and the length of
time spent in imbibing it. The older the alco-
holic the longer and the more ether required to
etherize him.

3. Size. Fat and short-necked people are
good examples of the differences in taking ether.
They are harder to anesthetize and to
hold for any length of time under the influence
of ether, both of which circumstances increase
the danger. This is no doubt due to the differ-
ent degrees of swelling of the tongue and the
mucous membrane of the epiglottis and larynx,
which occurs in cases not well taken. Some
writers claim in subjects of obesity the mucous
membrane is more prone to the action of irri-
tants than in sparsely-built people.

This would appear, then, the reason why fat
and short-necked people do not take or bear
ether as well as the sparsely-built, because the
mucous membrane secretes more actively, and
with the swelling of the adjacent parts of the
throat acts as a mechanical obstruction to the free entrance and exit of air.

4. Temperament or Education. Temperament is an important factor in the giving of ether. Even-tempered people, who are no doubt the bravest people, take it better than irritable ones. They are in a better condition, on account of their self-possession and composure, to reason with, and to carry the reasoning into execution.

Women are more even-tempered under surgical procedures than men, and will not resist the inevitable. Very seldom have I found it necessary with women to ask assistance in giving them ether. In most instances requesting them not to make resistance was sufficient. Encouragement to take it well is more effective usually than all else, for they all want to take it better than any one else ever did, and how easy to make them believe they are doing it.

Talking, laughing, or crying are favorable in inducing etherization, for the patient freely expires, which is involuntarily followed by a deep inspiration, and the desired effect is soon obtained. The taking of food before operations is most deceptive, and the digestion of it will differ according to the temperament of the patient. Some will eat a fairly good meal from four to six hours before an operation, and thoroughly digest it. The more nervous and irritable will eat sparingly of a supper the night previous, but will only partially digest it, and will throw up undigested matter the next day following the operation.

I have often seen coffee or tea given four or five hours before an operation, yet be ejected from the stomach while the patient is coming out from the effects of the ether. A difference of importance in taking ether is marked in the sensitiveness of the fauces, as there is a difference among patients in this respect. It is best to inquire before giving it if they have sensitive throats, for this is often a guide to giving it.

The suffocation usually produced is more marked in hyper-sensitive throats than in those less sensitive. In the majority of cases, however, the pharynx is very sensitive to the fumes of ether, and the quicker you destroy that extreme sensitiveness, by pushing ether from the beginning, the better and safer will it be taken. By abolishing this sensitiveness as rapidly as possible, it prevents to a great extent the swelling of the mucous membrane, the coughing and vomiting, which are almost sure to follow from a slow and irritating administration. For this reason, if for no other, should near relatives be excluded from the room, for their presence and anxiety will involuntarily cause a slower administration from an innate desire to appear more humane. And, too, it increases the danger by allowing the long-continued irritating effect of the ether to more thoroughly arouse the activity of the salivary glands, and stimulates also deglutition, coughing, nausea, and vomiting.

By an effort of the will anesthesia can be either advanced or delayed, so it is of the greatest importance to first gain the confidence of your patient, and thus you can accomplish more.

I have noticed the sense of suffocation lessened very much at times by explaining to the patient to expect it, but to remember that it is only a feeling with no harmful effect. It is wonderful how far this remembrance will sometimes be carried by patients; often until they are in a good condition to fall an easy victim to an increased amount rapidly given.

Education and refinement are positive aids to a good and quick anesthesia. The contrast in hospital and private practice is well marked. In private practice, among the educated and refined, you gain the confidence and co-operation of the patient. In hospital practice among the laboring classes, where the word experiment is never fully lost sight of, you seldom gain the full confidence of the patient, and less often his co-operation.

In reference to the special senses, I have noticed the sense of hearing to be the last to succumb to ether.

Patients will oftentimes tell afterward of some word spoken after a supposed loss of consciousness. In one instance a young man, while under ether, and while the operation was in progress, heard me tell the operator his pulse was 110. There could be no mistake about this, as it was the only time the pulse-rate was
asked or given during the entire operation. Insensibility to the part was lost, yet his hearing and memory were not affected.

The question of stimulation before an operation is an important one. As generally recognized, stimulant doses of whisky or brandy are most essential before giving chloroform. It being a heart depressor, even from the beginning, we can readily see the advantage in giving a stimulant before. But with ether I believe stimulants are contra-indicated, because we are adding rapid heart stimulants to a greater one, ether—thereby overstimulating and taxing the heart in the beginning, when it is not indicated or necessary. Overstimulation of the heart from any cause has long been recognized as an injury, which can but weaken its action after a time.

5. Health. When the heart and respiration are good, especially the respiration, there is no danger in pushing the ether rapidly for the brief period while going under it; though when fully under its influence this method, if continued, would become a serious danger. The danger is mostly in the discrimination to accurately judge when the patient is fully under it. One of the greatest aims of an anesthetist is to prevent secretion and accumulation of mucus in the patient’s throat; and the more rapidly ether is given the less mucus there will be. After a slow etherization, with great secretion and accumulation of mucus in the throat, and stertorous breathing to follow, it becomes necessary to keep the inferior maxilla forcibly pushed forward throughout the operation, much to the discomfort of operator and administrator. To torture a patient for twenty or thirty minutes trying to give ether slowly and safely (?) and painlessly (?) is a sad sight, and is not unlike the Frenchman’s method of cutting his dog’s ears off, namely, “little by little, so as not to hurt much.” Reflex swallowing, coughing, and vomiting are sure signs of incomplete anesthesia, and, unless accompanied by cyanosis and difficult breathing, show that the ether should be pushed.

When once under its influence just enough should be given to keep the reflexes in abeyance. This requires but little. If the reflexes are allowed to return, the inconveniences of coughing and vomiting are not only most annoying to the operator, causing delay and disarrangement in his work, but increase the danger to life. Not a few cases of death are due to inhaling suddenly the vomited matter. The reflexes should be anticipated and prevented by a deeper narcosis. I do not believe patients are ordinarily benefited by allowing them to “come out for a minute” during an operation, as advocated by many, because the increased quantity of ether given necessary to again put them under it is more harmful than a mild continuance of it throughout the operation.

In regard to position, patients take an anesthetic better when the head is lower than the body. This position predisposes to a cerebral hyperemia, which is more favorable than a cerebral anemia, and, too, the trachea is freer from obstruction.

Nelaton, Sims, and others believe chloroform poisoning is principally due to a cerebral anemia. This must be true also of ether. Never is a patient’s condition alarming with flushed cheeks and pink ears, therefore it is best and safest to predispose to a cerebral hyperemia. The breathing is better and the aeration of the blood more complete, as shown by the color of the face.

Anesthetics should never be continued on a pillow, yet it is best often to commence them on one; for all people intuitively believe they can breathe better with the head elevated. How easy after they are unconscious to slide the pillow out and arrange any little detail.

6. Disease. The fear of valvular or functional troubles of the heart is very often overrated. I have never seen a valvular diseased heart seriously affected by a proper administration of ether, and believe the increased action is compensated by the additional strength given to it by the ether. I would hesitate more in giving ether in a diseased lung or kidney than in a diseased heart.

In bronchitis an excessive secretion of mucus is already established and needs but little ether to augment the flow and early complicate the condition. In asthma it is not well taken, because there is always a co-existence of bronchitis. It relieves the muscular spasm of the bronchioles, but it increases the secretion of
mucus. This mucus is especially dense, and contains the Curschman spirals or molds of the bronchioles.

In kidney lesions ether undoubtedly adds a low grade of inflammation, which is noticed in the increased amount of albumen following etherization.

General Remarks. The after-effects from ether are largely dependent upon the manner in which it was taken.

If taken rapidly, without complications arising, it is thrown off rapidly with usually no nausea or vomiting.

If taken slowly, with a struggle, great secretion of mucus in the throat and stertorous breathing, it is thrown off slowly, with nausea and vomiting almost sure to follow. Therefore the period of recovery is in proportion to the manner and time of the etherization. There is less shock after a quick etherization, because the patient takes less and is not exhausted from muscular efforts of a long resistance.

There are two kinds of breathing that should never be confounded, namely, the palatine and laryngeal.

The palatine is produced by vibrations of the soft palate when the mouth is open, and is indicative of a safe anesthesia approaching a natural sleep.

The laryngeal is always a danger signal, and caused by the swelling of the mucous membrane of the pharynx and larynx, and in sound approaching a crowing character as in croup, and indicating mechanical obstruction.

This is perhaps the only time when it is absolutely necessary to withdraw the ether and let the patient come out for a while until the swelling subsides. It is more important to watch the respiration than the pulse, for if the respiration is good the pulse will never fail first. Therefore it is more important to employ artificial respiration first of all in accidents, and to rely chiefly upon it. Injections of respiratory stimulants are as essential as the cardiac, and of these strychnine and nitro-glycerine are the best.
In large accumulations of mucus in the throat I have found that by turning the patient's head to one side as far as practicable and compressing the alæ nasi at each expiration and relaxing at each inspiration, a sufficient amount of mucus will be expelled from the mouth to allow a good respiration. In comparison to the time of administration of the two anesthetics, chloroform and ether, there is very little difference.

To give chloroform with safety requires as much time, ordinarily, as in giving ether. Of course if it is pushed, it is quicker in its action, but the danger is greatly increased.

I believe statistics will show most of the deaths from chloroform occurred in the early stages, showing it can never be pushed in safety as can ether. With the exception of children, it is seldom chloroform is given to the surgical degree and borne well under five minutes, and more often longer. In the last one hundred cases of ether, given in private practice, I have averaged eight minutes per case. The slowest was sixteen, and the quickest three minutes. In regard to the various methods of giving ether it makes but little difference so you have the essential feature of confining it. The carefulness and experience of the administrator being the real safety, I use a very simple cone which I devised after experimenting with many kinds. It is a pamphlet, a towel, and two pins. It has to recommend it the following:

1. Perfect cleanliness, a new cone for each anesthesia.
2. Quickly made and always at hand.
3. Most inexpensive.
4. All the essential points for a good and safe anesthesia.

It is made by spreading the towel out and placing the pamphlet at one end with a two-inch margin left for a grip over it. Grip each side by now folding the long edges of the towel in over the pamphlet. Turn the pamphlet over once, and you have lined the cone. Now fold the pamphlet sideways to the long axis of the towel and you have the cone complete, except the two ends not closed. Bring the long strip of the towel left over the sides of the cone for one revolution, and pin when you reach the end of the towel.

**DUPUYTREN'S FINGER CONTRACTION.***

**BY STEELE BAILEY, M. D.**

The accepted theory of the cause of Dupuytren's contraction is that it is of constitutional origin, and while gout and rheumatism are the essential elements in many persons who suffer deformity from disease of the palmar fascia, I am impressed with the belief that syphilis may act as a primary cause also.

I am driven to this opinion by one case which was recently under my care; and while one swallow does n't make a summer the evidence in this instance is *prima facie,* and I trust that I may make it convincing to you. In the family to which this lady belonged, as far back as history goes, there has never been seen a case of gouty diathesis or rheumatic fever. I mean that neither disin-e with these folk is hereditary. While gout can be developed in any constitution, it is pre-eminently a disease in which heredity can be traced in fully sixty per cent of the cases. The family is one of wage-workers, abstemious in their ways, and rather noted for longevity.

It has been supposed hitherto that women were exempt from contractura palmaris; however, as there are exceptions to all rules, so it is on this occasion. The lady was of good social grade, sixty seven years of age, and when I saw her first the fingers were permanently bent. I was consulted with reference to her general health, and also if it were possible to remedy the existing deformity. While there was no pain connected with the contraction, she was annoyed and depressed by constantly recurring inconveniences. To comb the hair, to change the dress, to lift a weight, to write, in fact to perform any manual duty was a burthen, if not an impossibility. The thumb on the right hand was drawn to the middle of the palm, motion was only possible between the first and second phalanges.

The fascia of the palm and the fibrous tissue of the inside of the fingers of this hand were diseased in a somewhat higher degree than on the left. But she was bad enough off in both members, so that life was hardly worth living.

*Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Association.
She frequently wished the Gordian knot might be cut, and her desires were gratified in less than a couple of moons after my first visit by an attack of acute pneumonitis, which quickly did the work for her.

The disease begun in the thumb and extended gradually. After a varying interval, the precise time she could not remember, the disease attacked the little finger of the left hand, and by degrees the ring and other fingers became involved. This patient in her earlier years enjoyed robust health; was never troubled with either rheumatism or gout. As a widow she had a small estate, which was inducement enough to attract a progressive gentleman many years her junior. He informed me that in an immoral moment he contracted syphilis from an "old flame" he chanced to meet, and without the consciousness of himself being bitten he did the honors at home, and, as he expressed it, "burnt the old woman." Treatment was given her by the family physician in complete ignorance to her of the real nature of the malady. She passed through the several stages, the disease being pretty well kept in abeyance. Seven years were passed from the initial lesion of syphilis before the least sign of contraction of the palmar fascia became manifest.

The morbid process, as before remarked, began in the thumb by a little weakness, which was rapidly followed by bending in all the fingers of the right hand. She applied pomades, calming lead plasters, stimulating and antiphlogistic liniments, et genus omne; she was physicians with specifics and non-specifics; in fact, she was well quacked. She had the diet cure, the faith cure, drank mineral waters and employed thermal baths; but all was a tinkling cymbal.

This malady being of obscure etiology, can we not make a diagnosis as to cause by exclusion? She had no gouty process, no rheumatic diathesis. She did not remember ever to have had an inflammation, either acute or chronic, in the palmar aspect of the hand, and it was only after the nutritive processes were much interfered with, and sequently the nervous system, by the "lucus venera" that contraction began to exhibit itself.

Processes to a certain extent may be described, but ultimate causes are sometimes beyond the reach of the subllest intellect, and, as the problem of palmaris contractura has not been settled, we may reasonably suppose that the specific effects of syphilis may be a factor just as that which has been attributed to gout and rheumatism. I can not divine any other solution. This case is novel: first, in its occurring in a female, which is rare; secondly, that the thumbs were contracted; both Dupuytren and Malgaigne say they never saw contraction of the thumb.

A moderate permanent bending of the fingers of both hands is frequently seen in many old persons, men and women, especially laborers; they are unable to extend the fingers completely.

With advancing age the adipose masses between the linea mensalis and the flexion-furrow, corresponding to the metacarpal articulations of the fingers, disappear regularly, and contraction of the palmar fascia results; but to these folk it is of little moment, and they plod on to the millenium without asking for relief.

Contraction in these instances may be due to shrinking of the surface of the aponeurosis palmaris; but to make a distinction between this and of the fibers that ascend from it to the integument is subtle and useless. It is evident that even in cases where the "brides" first begin to shrink, the permanent bent state of the hand will be followed by shortening of the palmar fascia itself. But this short and imperfect sketch is not to discuss either the anatomy or surgery of contractura palmaris, though in these aseptic days it is more amenable to surgical methods than was believed by Astley Cooper, Dupuytren, Goyraud, and Malgaigne, who invariably told sufferers that operative proceedings offered no guarantees of success.

My object is merely to bring forward, as possible, another etiological factor for Dupuytren's finger contraction, apart from gout and rheumatism, which have always been considered and doubtless are the fount and origin of the malady with the majority of the unfortunates, about which medical literature has been silent, and also to have an expression from this Society concerning the matter.
Syphilis, which is the most striking illustration of a cachexia, was outwardly apparent, and as empiricism has declared that it is useless to treat syphilitic sequeze without directly treating the syphilis, my therapeutics were tied to hematics and mercurials, with the belief that by curing the anemia she might bear surgical interference for the relief of deformity after the manner of Madelung, of Bonn, with whose operation you may be familiar.

STANFORD, KY.

A CASE OF URINARY FISTULÆ,*

The Result of Stricture of the Urethra.

BY J. V. PREWITT, M. D.

Urinary fistulae are not of a very rare occurrence, from the fact that the cause to which they owe their origin has not been properly dealt with at an early date, or the case is not seen until the fistula have already formed. Urinary fistula may communicate with the bladder or urethra, the latter the most commonly, and are found to be preceded by extravasation, abscess or rupture of the urethra, and are generally the direct consequence of some urethral obstruction. They also follow an accidental wound in the perineum or urethra or such operations as lithotomy. Fistula open most commonly in the perineum or through the scrotum. They may, however, discharge in various places, as in the thigh or over the pubes. A fistula of the latter place is always the result of extravasation and an incision at that particular point.

The case I desire to report illustrates those pathological conditions which are observed at a late date.

Case 1. J. W. B., aged fifty years, occupation a farmer, twenty years ago contracted gonorrhea, and was treated for the same by his family physician for something near six months. Thinking he was about cured, he discontinued treatment. A year later he noticed the stream to be somewhat diminished in size and twisting; had a desire to micturate very often, but finally was compelled to go to bed, suffering with retention of urine. His family physician was called in and recognized a strictured urethra, which he dilated, and the patient returned to work. Ten years ago his attention was called to a severe pain and a sense of weight and heat in the perineum, with chills and general febrile reaction, the stream being greatly diminished and pain greatly increased when he passed his urine. By this time he recognized that an abscess had formed in the perineum. It was opened, but this was shortly followed by the escape of urine through the opening at each micturition. About this time (ten years ago) he claimed that, while riding on a sulky plow, his scrotum was bruised and several little boils appeared over the scrotum. He had them opened, but it was shortly followed by urine passing out at the point where they had been opened. I was called to see him last February, and upon examination found him suffering with an old stricture in the membranous urethra and two in the anterior urethra, and the scrotum and perineum perforated by fistula in ten or twelve places. The odor in the room was very disagreeable, as he had had incontinence of urine for the past six or seven years, which occurs when the compressor urethra and muscular elements of the prostates are paralyzed, and is also present in a number of cases of prolonged overdistension of the bladder, the pressure from behind overcoming the normal resistance of the muscles. His condition was very alarming, owing to the fact that he was very much emaciated.

I operated March 16, 1892. The patient was placed in lithotomy position, Dr. J. Moore administering chloroform and Dr. Crutcher assisting. I did a perineal section, opening the urethra in the membranous portion, extending the incision to the apex of the prostate, at the same time parting the old stricture. The bladder was washed out with a hot solution of boracic acid and dressed antiseptically. I ordered boracic acid to be given internally every four to six hours and milk diet for a few days. The two anterior strictures were of large caliber and were afterward treated by dilatation. And the fistula not being sufficient to admit of a small probe, I introduced a hypodermic needle and injected carbolic acid in each fistula. He had

* Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Society.
fever for the first few days, but the temperature did not rise above 102° at any time. The patient has made a good recovery, having gained something near thirty-five pounds in weight since the operation.

When fistulae are due to strictures the treatment should be directed to the strictures, and operative measures are seldom needed upon the fistula of the perineum or scrotum, from the fact that simple unindurated perineal or scrotal fistula will readily disappear when the stricture is properly dilated; but when there is much induration about the fistula, I would insist that the latter be dissected out together with the pouch, which is usually found near the urethral surface.

WEST POINT, KY.

METHYL-BLUE.*

Some Remarks Concerning a New Remedy.

BY W. F. BOGGESS, M. D.

It is with great reluctance that I come before you with what is generally considered a chimerical paper. No longer is it possible for a man to advance a chimerical theory of disease and not be silenced by the forcible arguments or deserved contempt of those competent to judge of its merits. Still, realizing that the treatment of diseased conditions is largely empirical and specifies distressingly few, I make no further apology for bringing before your attention one of our many new remedies, methylblue. The aniline dyes, innumerable in character, varied in effects, and proliferating so rapidly that it dazes one to contemplate their number, have never been until recently used as a therapeutic agent. Their function and use have heretofore been confined to the arts and in staining pathological tissues and bacillary growths.

A year or so ago some progressive Eastern surgeons and pathologists began the use of some of the aniline colors upon morbid growths. The pyoktanin, blue and yellow, and fuchsin were employed, both topically as injections, into diseased tissue. Old chronic ulcers, rapidly proliferating epithelial growths, pus-secret-

* Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Association, May, 1892.
fore this minimum discharge of pus; a tumor at seat of pain; epithelium from pelvis of kidney and infundibula; blood globules; mucus; every indication of an extensive pyo-nephrosis, loss of appetite, and rapid emaciation. I immediately put this patient on two-grain doses of methyl-blue every three hours, and in a very short while marked improvement was noticed, until now, six months afterward, patient is passing three pints of urine, in which only at rare intervals can any pus be found. He has regained his appetite, has gained fifty pounds in flesh, and is in better health than for years.

He continues to thank God, praise his doctor, and take methyl-blue.

I will not impose further upon your patience, gentlemen, than to say that methyl-blue has been used in other kidney cases, both acute and chronic, with excellent results, both by me and other physicians, which cases will be reported in time.

LOUISVILLE.

Societies.

LOUISVILLE CLINICAL SOCIETY.*

Stated Meeting, June 21, 1892, Dr. J. M. Mathews, President pro tem., in the chair.

Dr. W. O. Roberts: The patient from whom this specimen was removed is in her sixties, sixty-two or sixty-three; I do not know her exact age; she is an exceedingly fat woman. There have been removed from this patient at different times four tumors from the breast. I removed the last one, which was eighteen years ago; examination showed it to be malignant growth; there has been no recurrence. About three years ago she had an umbilical hernia, a portion of which was irreducible and gave her a great deal of pain. I operated upon it and found the irreducible portion to be omentum, which was tied off and the opening closed. She got along without any trouble for a year, then there was a recurrence of the hernia, and I operated again with the same result. The hernia recurred again and grew rapidly, so that at the time of the last operation, a few days ago, it was nearly as large as a hat-crown.

When I cut down upon it I found the intestines, especially the large intestine, adherent, so that it was with some difficulty that I was able to detach it. After it became detached she had a violent vomiting spell, and a large amount of the intestine protruded through the opening. In replacing the intestines my hand came in contact with a solid body, and upon examination it proved to be an ovarian tumor, which was removed. It was a simple multilocular tumor, the larger cyst of which was tapped, and I suppose about a quart of fluid came out of it, a thin gelatinous fluid; you will notice there are several smaller cysts. This tumor was not suspected prior to the operation for hernia, and but for the fact of the patient vomiting and expelling the intestines through the opening, I suppose it would not have been detected during the operation.

I also have a tumor which has already been exhibited to one of the medical societies, but as it and the history of the case are of considerable interest, and as there is a very important point in connection with the case that has come up since the report was made to that society, I would like to again mention it. The patient from whom the tumor was removed is a man, fifty-seven years of age, and a patient of Dr. Palmer. He had been troubled for several months with frequent and difficult micturition, and last January became unable to urinate at all, so that a catheter had to be used. I saw him in March, and up to that time he had been unable to void his urine; the catheter had to be used sometimes every half hour during the day and very frequently at night; his urine was loaded with pus. We made an examination under chloroform, found no stone, but there was some little difficulty in getting into his bladder, and we were under the impression that he had an enlarged middle lobe; the lateral lobes did not seem to be at all enlarged. He was put on boric acid internally and locally, and he returned to the city about the middle of May very much improved as regards the condition of his water, also as to the frequency of need to use the catheter. He would go from two to three hours without using the catheter. We advised a suprapubic cystotomy, which operation was done at the Norton In-
THE AMERICAN PRACTITIONER AND NEWS.

firmary. When we reached the interior of the bladder we found a tumor about as large as the first joint of your finger that completely closed up the neck of the bladder. It was a pedunculated growth. I caught it with forceps, and in pulling it tore off a considerable sized piece, and then afterward picked it off little bits at a time until it was entirely removed. After the operation I used the kind of drainage-tube which is used by Dr. Keyes, of New York; whether it is his original idea or not I do not know, but it is an excellent tube. This man remained in the hospital I think two weeks, possibly a little longer. When he left for his home the urine was still being passed through the abdominal wound. The drainage-tube was taken out, or rather it came out in an effort to vomit, and in attempting to replace the tube it gave him so much pain I desisted, and finally concluded to leave it out altogether and see whether or not after closure of the wound he would be able to void his urine the natural way. He returned to his home, as I said, about two weeks after the operation, and a day or two ago I received a letter through Dr. Palmer, which was written by the patient's son, a doctor, graduate of Jefferson College, under date of June 16th, a little over a month after the operation, as follows: "My father is doing very well indeed; the wound is almost closed, passes urine the natural way with but little leakage through the abdominal wound, then only when he is urinating; has to get up only a few times at night to empty his bladder. There is still some little pus in the urine. He passes urine with sufficient force to throw it at least three feet from him."

I think this is of great interest in view of the man's having had retention of the urine for so long a time.

Dr. S. Flexner: I would like to ask Dr. Roberts whether this tumor did not spring from the inside wall of the bladder. I understand it has not yet been examined. The commonest form of tumor springing from the mucous membrane of the bladder is the papilloma. This does not appear to be a papilloma. I think it would be very desirable to have an examination made so as to know the exact nature of the tumor.

Dr. W. C. Dugan: Was there any serious hemorrhage at the time of operation, and if so how was it controlled?

Dr. Roberts: The hemorrhage was very slight; I used only hot water.

The essay of the evening was read by Dr. J. W. Irwin; subject, Puerperal Tetanus:

"The patient of whom I shall speak was not quite seventeen years of age. She was sent to me from another city. I saw her for the first time in January, 1892. She had reached the ninth month of utero-gestation with her first child. She was of medium height, strong and healthy, of dark complexion, and weighed one hundred and thirty pounds. Her previous history did not reveal any hereditary nervous or mental disorders, or troubles of any kind. The organs of digestion were in a healthy condition, there was no edema, the kidneys were found to be free from disease. On February 13th, at full term, she gave birth to a female child which weighed seven and one half pounds. The labor lasted nine hours and was less severe than is usually the case in primiparae. The amniotic fluid was not excessive in quantity, and the abdomen was not unusually enlarged. The placenta came away about eighteen minutes after the birth of the child. Very little hemorrhage occurred. All clots and shreds of membranes were carefully and thoroughly removed. The vaginal tissues were found to be free from abrasions, and there was no laceration of the neck of the womb. The patient had not been exhausted by the labor.

"Thirty minutes after the birth of the child the patient became very weak and faint, and the action of the heart grew slow and feeble. Evidence of internal hemorrhage was sought for and none found. The patient's head was then lowered beyond the horizontal line of the body, but the alarming condition continued for fully forty minutes. My esteemed friend, Dr. Wathen, was sent for to see the case in consultation, but on his arrival the patient was revived. A careful examination of the case failed to discover the cause of the alarming symptoms. There was no cardiac disorder, and the kidneys were found to be free from disease. The patient had been well nourished
and had not been exposed either to cold or dampness.

"From this time the patient did not have a symptom indicating any disturbance until on the morning of February 24th, or eleven days after her confinement, when she felt a choking sensation in the throat and a fullness about the jaws. She had pain in the back, and the head was drawn slightly backward. There was a sense of tightness around the waist and in the chest. She complained of a tremulous feeling, and at the same time the body was drenched with perspiration. On the night of February 24th the patient did not sleep, owing to severe paroxysms of pains in the back, which at times encircled the body. On the morning of February 25th the jaws had almost closed. Barring an occasional attack of trembling in the masseter muscles, the muscular contractions about the face were permanent. The muscles of the back, chest, and abdomen were firmly contracted, and accompanied by a feeling of suffocation. Respiration was irregular, and only twelve to the minute. The lochia was unaffected. The axillary temperature was 102.4° F. The urine was scanty and of a dark brown color, and did not contain albumen. Pain in the back and chest was continuous, but it was more severe in paroxysms. There was much hyperesthesia present, and exposure to a temperature of 70° caused the patient great discomfort. The bowels were sluggish, but small doses of saline laxatives caused free movements.

"The expression of the patient, as well as her general condition, showed that something more severe than an ordinary fever had attacked her. The face wore the expression of intense suffering. The occipito-frontalis muscle was contracted tightly, which caused the flesh and skin over the forehead to stand out in numerous hard bunches, between which were deep fissures running in every direction. The brows were drawn downward and inward, which gave to the eyes a sunken appearance. The muscles of the nose, cheeks, lips, and chin were in a state of contraction like those of the forehead. The wings of the nose were drawn outward and upward, which gave to that organ a flattened appearance. The eyes were suffused, and the lids were so much contracted as to cause the impression that they were too short to cover the balls.

"On February 27th, at 9 A.M., the temperature was 100.4° F., pulse 124, weak and irregular; at 9 P.M., temperature 101.2° F., pulse 130 and feeble. Perspiration now occurred in paroxysms and after severe attacks of pain. Hyperesthesia was more felt. Pain and contractions of the muscles of the back were more severe at night. Frequent paroxysms of nervous trembling attended by copious perspiration prevented her sleeping. February 28th, at 9 A.M., pulse 120, respiration 16, and irregular, temperature 100° F.; at 9 P.M., temperature 101.2° F., pulse still irregular and feeble, and patient on attempting to move or turn in the bed had attacks of pain accompanied by opisthotonus. From this time until March 16th the condition of the patient remained practically unchanged. Twice within the previous sixteen days the patient's temperature fell to 96° F. in the morning, but as evening approached it went up to 99° and 100° F. At no time during the course of the disease did the patient's temperature exceed 102.4° F., and this occurred once only—at the beginning of the attack. The temperature usually ranged between 99° and 100° F. The pulse varied very much in numbers and character; at times 108 and again 160, irregular and quite feeble.

"On March 16th the jaws became relaxed and the mouth could be opened without much effort to the extent of admitting the handle of a spoon.

"The muscles of the chest and back had become relaxed, and the paroxysmal contractions occurred less frequently. Pain was not as constant. At the end of six weeks from the beginning of the attack the patient was allowed to return to her home. A letter was received from her, bearing date of April 14th, saying that she was entirely well.

"The treatment of this patient, owing to the fixed condition of the jaws, presented some difficulties, but the absence of an upper molar tooth made the task much easier than it otherwise might have been. The act of swallowing was difficult and painful, and occasionally fluids escaped through the nose. The diet consisted of
milk, consomme, liquid peptonoids, and strained soups. To this was added from six to eight ounces of whisky daily. The hypodermic use of half-grain doses of sulphate of morphia, as occasion required for relief of pain, was found to be serviceable. Insomnia was a troublesome concomitant of the disease, and this condition I found to yield to twenty-grain doses of the hydrate of chloral, every second hour, better than to any other remedy. Sulphonal and chloralimid were given without any effect.

"Later in the disease a mild, continuous current of electricity was applied to the spine, but as it caused too much pain its use was abandoned.

"Iron and quinine were given in tonic doses with apparently good effect.

"From the description of the case I have just given it will be observed as one of those rare affections following parturition known as puerperal tetanus. In looking over the literature on this disease I find that many obstetricians have never seen a case of puerperal tetanus. In Galabin's Midwifery, page 698, I find the following statement: 'Puerperal tetanus is extremely rare in Great Britain; no instance of it occurred in 46,989 cases in the Guy's Hospital Lying-in Charity.'

"From every source, including the carefully collected cases of Dr. Garrigues, published in the American Journal of Obstetrics, volume xv, page 769, I find only thirty-two instances recorded as having occurred after full term in Europe and America during the last one hundred years. Currie reported to the Medical Society of London the first case in 1792.

"The disease occurs more frequently in hot countries, and the mortality is very great. Parvin's Obstetrics, page 590, gives the mortality in hot countries as 30.4 per cent. The mortality in Europe and America in cases occurring after parturition at full term is 84.4 per cent. These remarks do not apply to tetanus occurring after abortion, for in such cases the mortality is even greater. Twenty-eight recorded cases of tetanus following abortion show a mortality of 93.3 per cent.

"Until within the last few years the cause of this terrible disease was thought to be difficult labor, the retention of membranes in the womb, nervous excitement, mental distress, and exposure to cold and dampness. Climate, it was thought, conduced much to the number of its victims.

"In 1885 Nicolaier discovered the cause of tetanus to be a bacillus which corresponded to the Koch bacillus of the septicemia of mice, and which is especially found in horse dung. Rosenbach, in 1886, confirmed the discovery of Nicolaier, and from their combined evidence the disease, it is now believed, is infectious in character, and communicated chiefly from horse dung."

**DISCUSSION.**

Dr. J. A. Ochterlony: The paper read by Dr. Irwin is extremely interesting, not only because of the rarity of the disease, but because of the fortunate issue. The best *resumé* of puerperal tetanus or tetanus occurring in connection with abortion, labor, and in non-puerperal state in women that I have ever read is that of Prof. Simpson, which is found in his miscellaneous works. He reports quite a number of cases as having occurred not only in connection with labor at full term, but also after abortion. A very interesting report of a case that he gives is that of a woman, who had an intra uterine polypus. He describes it, if I mistake not, as a cellular polypus, that it was extending into the vagina, and came away almost without any effort at assistance, so that there was no damage done to the parts by surgical procedure; that a few days after the exit of the polypus tetanus developed and the woman died. The number of cases of abortion followed by tetanus that Simpson reports is quite considerable in view of the rarity of the disease. In the cases that occurred after labor my recollection is that it was observed quite as frequently in women who had not had particularly severe labor, and where there had been no instrumental interference. The only point I want to call attention to is one relating to the prognosis. Whenever the disease lasts longer than four or five days it usually terminates in recovery, so that if you can tide the patient over the first few days, certainly the first five or six days, the probability of recovery greatly increases.

In thinking over the subject it has often
puzzled me how to account for the development of tetanus in puerperal women who have seemingly been entirely free from any exposure to what is now considered the cause of the disease, namely, the peculiar bacillus. I have studied a number of reports of cases, and must confess it was very difficult for me to see how the infection had taken place. The same difficulty, however, is encountered when we try to explain the occurrence of tetanus as an endemic disease. There is what is called idiopathic tetanus, and it is just as difficult to understand how the infection occurred then. Of course the same thing is true in regard to a number of other infectious diseases. I have never seen a case of puerperal tetanus.

Dr. S. Flexner: I have been very much interested in Dr. Irwin's report. I have never myself seen a case of puerperal tetanus, and only wish to say a few words with reference to the peculiar bacilli causing the disease. The recent work of Kitasato on tetanus, which is too recent to have appeared in the authorities quoted here this evening, indicated that the several organisms originally considered to be the cause of this disease are not the cause, but that it is caused by a single organism. A great deal of difficulty has been met with in the study of tetanus from a bacteriological standpoint, because of the fact that the peculiar bacillus does not grow under ordinary circumstances, but requires the exclusion of oxygen. It will grow in an atmosphere of some other gas than oxygen, hydrogen usually being used to replace the oxygen, and it is hence an anaerobic organism. On account of this peculiarity the bacillus of tetanus is not as easily separated as other germs which grow in the presence of oxygen. The method introduced by Kitasato consists of heating a culture which contains the bacillus of tetanus, mixed with other things, to a temperature at which all of the vegetative organisms are destroyed, and under which circumstances the tetanus germ gives rise to spores which resist this temperature and may afterward be grown out into form of tetanus bacilli.

The organism of tetanus has been found in the earth, commonly about stables, often in gardens, and tends to grow in particular localities; for instance, certain portions of Long Island are noted from the fact of the development of tetanus following injury in great regularity. With reference to the occurrence of idiopathic tetanus, to which Dr. Ouchterlony referred in his remarks, I can not help considering that Dr. Irwin's example is hardly one of that class. It seems to me that the case Dr. Irwin reports must be considered as one of the traumatic variety, as the act of parturition itself suffices to produce a lesion which can in some manner become infected. As to the mode of infection, the hands and instruments have to be considered. The danger of infection through the air, while not totally excluded, perhaps is not nearly so great as the former. The peculiar organisms of tetanus are now known to develop only locally at the seat of the injury; they never invade the blood and tissues, but produce a poison known as the toxalbumen of tetanus, which entering the blood gives rise to the constitutional effects of the disease. The fact of the local development of the organisms indicates to us where antiseptic measures are to be applied and, moreover, the source of danger in carrying the infection from one case to another. It is to be emphasized that all the secretions from the affected part are to be thoroughly disinfected.

Dr. A. M. Vance: I would like to ask if anybody has any information concerning the contagious nature of tetanus. I ask this question for the reason that some time ago I saw a case which seemed to prove conclusively that it is contagious. In this instance a drainage-tube was used on a patient suffering with tetanus, and afterward used on another patient who developed tetanus and died in nine days. I think I had the same year seven or eight cases of tetanus. I am inclined to believe that very often these cases can be traced to cases that have gone before in the same neighborhood, in the same houses, etc.

Dr. J. G. Cecil: I have never seen a case of tetanus in the puerperal state. Some time ago, however, I had occasion to look the subject up and was very much interested in it, especially on account of its rarity and its pathology. Many cases, I think, that are otherwise obscure might be traced to the dust of the street. However, I can not see how the
case reported by Dr. Irwin could have been infected from this source. I would rather consider it a case of traumatic instead of idiopathic tetanus. I believe that with every woman, no matter how complete and easy the delivery, the genital tract is sufficiently abraded and wounded to afford opportunity for the absorption of material, septic and otherwise.

Dr. I. N. Bloom: The micro-organism theory of tetanus was very well established in an instance I recall where there was a large stable in the vicinity. There had been on an average from ten to fifteen deaths from tetanus in that immediate locality per year. Afterward the stable was thoroughly overhauled and disinfected, and there was but one death from tetanus in a year; after that period for a year or two there was not a case of tetanus, showing the benefits derived from asepsis; also proving almost conclusively the theory regarding the origin of tetanus.

Dr. Irwin: I have very little to say further on the subject, excepting as to the prognosis. Dr. Ouchterlony has mentioned as a fact that if the patient survived four or five days the chances for recovery were greater. I think the most important point touching upon the question of prognosis is the time at which the patient is attacked by the disease. If the tetanus comes on late after the traumatism, the patient has very much better chances for recovery than when it comes on earlier. In the case I have reported the disease made its appearance on the eleventh day.

In regard to the question of infection, the patient had her own nurse, which she brought with her from another city, a trained, accomplished woman. She made use of a disinfectant solution of carbolic acid and boric acid, about five per cent of pure carbolic acid in a saturated solution of boric acid. She always washed her hands in this solution before coming in contact with the patient in any way. The water for ablution was always boiled and some of the solution added to it before being used. No internal washing was practiced, no syringe used for any purpose. In attending this woman I used carbolated vaseline after first washing my hands in the water and solution above referred to. The patient was confined in a fine, elegantly furnished house, on the first floor, second room from the front. There was no horse stable on the place. There was a vacant lot on one side of the house, and plenty of ventilation and plenty of pure air. The house stood within about ten feet of the sidewalk. The street in front of the house was paved with granite, and of course there was a great deal of travel backward and forward over the street. If she took the disease from horse dung it is evident that it was deposited on the street and carried by the wind into her room.

Concerning the infection in this case from any other cause, I have not attended a case of tetanus before in eight years, and never before have seen a case of tetanus following parturition. This is the first case in my experience, and I hope it will be the last, although the results are far more encouraging than I had hoped for. I do not think with Dr. Ouchterlony that this was a case of idiopathic tetanus, and I have classed it as traumatic tetanus, the act of labor itself being the cause of the traumatism. No case could have been attended any better so far as antiseptics are concerned than the case I have mentioned. To show that the patient is entirely well I will read a portion of a letter recently received from her:

"I am overjoyed to tell you that I am entirely well and look just as girlish as ever. I will never forget you for your kindness."

Dr. Ouchterlony: It seems to me that the subject is very much like that of erysipelas. The general belief is that erysipelas is always produced by infection through some abraded surface, and it is very likely the so-called cases of idiopathic tetanus are those in which we have not been able to establish the assistance of trauma; it is possible, however, that it may exist. Of course parturition places woman in a condition most favorable to infection, the abraded surface of the uterus constituting the surgical condition.

Dr. L. S. McMurtry: I wish to exhibit a specimen of ovarian cyst, which is not of special interest excepting as a specimen. Its walls, as you will observe, are very thin, and I deem myself fortunate in being able to remove it without rupture. The patient from whom this
cyst was removed had suffered a miscarriage, and following it had an acute attack of pelvic peritonitis lasting for several weeks. The tumor was found in Douglas' space immediately to the left of the uterus. The left fallopian tube was found to be in a diseased condition, and was also removed. The tumor was but slightly adherent and was detached without difficulty.

Dr. Dugan: This case is very interesting to me owing to the fact that I operated upon one similar to it only a few days ago.

Dr. A. M. Vance: About a year ago, in September, I saw first a little boy about ten years of age, and diagnosticated suppurative disease of the hip. The case came under my treatment and ran a very rapid course. There was an abscess and evidences of excessive bone disease. The patient was put in the Children's Hospital three months ago, and the abscess opened and irrigated. At the time the abscess was opened I spoke of there being very little tissue between the femoral artery and the abscess cavity, and we therefore used no drainage-tube for fear sloughing would take place. The boy up to that time had been having a high fever. A few days after this I had a telephone message to come to the hospital at once, that the patient was bleeding; I told the nurse to put her thumb on the artery at the pubic bone, and hold it until I could reach there. I found upon arrival at the hospital that the femoral artery had ruptured, the boy having lost a great quantity of blood. The vessel was tied by candle-light and the limb wrapped in cotton wool and elevated. Gangrene, however, was present at the end of forty-eight hours, and, notwithstanding the patient's temperature was 104° and pulse beyond counting, amputation was decided upon. I think Dr. Guest remarked when the boy was put on the table that the pulse was, according to his count, 170 per minute; that is, he counted a quarter and it amounted to 170 for a minute. Dr. Dugan saw the case in consultation, and we decided that there was about one chance in a thousand of saving the boy's life by amputation at the hip. This was done, and the time consumed in the operation, from the time the patient was gotten ready until he was taken to another room after the dressings were applied, was about nine minutes.

The boy has about gotten well; I will state that the femur was very much involved, probably about four inches; the acetabulum was also involved; I did not take time to clean it, hoping that nature would do so. I believe that if this patient had been kept on the table a few seconds longer he would have succumbed. The child would have died at the time of the hemorrhage had the nurse not had the courage to have held the artery.

Dr. Roberts: I would like to ask Dr. Vance if there was any hemorrhage at the time of the operation.

Dr. Vance: There was very little hemorrhage during the operation.

Dr. W. Cheatham: I wish to simply mention that I have seen three cases of brain growth within two weeks. One case in which a woman had hemiopia; she discovered on waking in the morning that she could not see her child lying upon her left arm—the left half of each field gone, the result of brain growth.

Dr. Bloom: At the Galt House, about a week ago, I was called to see one of the workmen who had been sunstruck. I took his temperature and found it registered 109° F. I have brought the thermometer here this evening to exhibit, and you will see it still registers 109°. I had the man wrapped in ice, as I understand this to be the most rational treatment for sunstroke, but the temperature never lowered, and he died a short time afterward.

I also want to state that the case of scleroderma I exhibited at a meeting of this Society, several months ago, remains exactly as it was at that time, except that all of the rose-colored spots visible then have entirely disappeared. I see the case every month or so.

Dr. Roberts: I saw a case of sunstroke several years ago, which I reported in the Medical News. We attempted to take the temperature, and the mercury went up to the top of the thermometer, 112.5° F., in about two minutes. It was a question as to how high it would have gone had the thermometer been longer.

Dr. Cecil: The report of Dr. Bloom's case calls to mind one that I have recently seen, an invalid child having spinal trouble, which de-
veloped into acute spinal meningitis. The temperature was taken on the third day of the acute illness and registered 108.5° F. She was put in an ice-pack, with cloths, sheets, and towels wrung from ice-water, and in thirty minutes afterward her temperature registered 108.8° F. The patient died on the third day of the illness.

Dr. Irwin: Thirteen years ago I attended two cases of typhoid fever, a boy about nine years of age and a girl eleven; both had a temperature of 109.25° F. It did not last long, however; in the boy two and a half hours, and in the girl three hours. The elevation of temperature came on about the fourth week of the disease in both cases. It came on simultaneously; the children were both members of the same family, and sick at the same time. The heat of the body seemed to be so great that the muscles quivered like the quiver observed in beef after it is skinned. Both of the children recovered.

Concerning the suggestion made by Dr. Bloom, that ice is probably the most rational treatment of sunstroke, I think Dr. Wood has pretty thoroughly established the fact that there is nothing equal to water. He prefers hydrant-water at first to ice, and says it ought to be poured on in a continuous stream, and, furthermore, that it should be long continued; that ice chills too rapidly. There is great danger in reducing the temperature too quickly in cases of sunstroke, owing to the partially coagulated state of the blood from the sudden heat. The sudden change in temperature by ice might cause death, while the application of cold water at first might be beneficial. I have seen a number of cases of sunstroke where the temperature was 107° to 108°, yet the patients recovered, but it was only after a great amount of perseverance. I have seen one case where the blood would not flow even though there had been made application of cold water. I think, to be of benefit in these cases, the application of water should be continued for several hours after the patient has begun to improve.

Dr. McMurtry: I would like to ask, for information, if it is not true that in sunstroke the blood will not coagulate at all, as it would do under other conditions. I have seen this statement somewhere.

LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*
Stated Meeting, July 22, 1892, Dr. F. C. Simpson, President, in the chair.

Dr. D. T. Smith: I would like to continue reports of a few cases: First, the two children I exhibited at the last meeting of this Society, suffering from a peculiar nerve trouble, their condition remains about the same.

Second, you will remember I brought before the Society, about six months ago, a child with a tumor on the head. This afterward developed into what was supposed to be sarcoma, growing very rapidly. The patient was taken to the Children's Hospital, and Dr. Cecil removed the growth. It had the appearance of sarcoma and was probably congenital. A few days after the operation the child died; no microscopical examination was ever made of the growth.

The third case is one that I presented to the Society about eighteen months ago, the patient having many symptoms of Renard's disease, or symmetrical gangrene, but not a typical case by any means. The case has been progressing, and the patient is now suffering a good deal of pain, complains of cold and numb feelings about the spine, etc. She is very apprehensive that it will run to a fatal termination. She complains of pain, especially between the shoulders, and a point about the lower one third of the dorsal vertebrae is decidedly tender on pressure. The appetite is still fairly good, but the condition of weakness, pain, depression, coldness of the limbs, etc., mark the progress of the disease. Since she left me she has been treated by a great many physicians and has undergone various kinds of treatment, none of which have been of any particular benefit. Now she returns to my care, and I must confess that I know of no remedy that would be of advantage. I proposed electricity in this case with but little belief that it would do any good. I believe it is a degeneration of nerve cells in the brain and cord, just exactly what kind I am unable to say. No medication she has used has done any perceptible good, one kind any more than another.

Dr. J. M. Ray: About one year ago I re-

*Stenographically reported by C. C. Mapes, Louisville.
ported to this Society five cases of congenital cataract that I operated on in one family. These children were brought here to the Blind School originally, and fell into my hands. I operated on all five by the needle operation. The oldest one, it seemed, had never been able to see at all. I did a pretty thorough operation on her, and in a week afterward there was quite a rent through the lens through which the light reached the retina, or partially so. I held my watch in front of her, and she would say it was very bright, although she did not know what it was. The other children had a little sight. The oldest child was about seventeen, and the youngest about seven years of age.

It is very curious that five children in the same family should be similarly affected. I noticed, not long ago, in some foreign medical journal a report in which the family history could be traced back through several generations, that is, a tendency in the family to the development of cataract in several generations. It is impossible to trace this family history back that far, but I find that the father has cataract, being completely blind in one eye and partially so in the other. He has a brother who has cataract, and this brother has a son who is also affected, and this is as far as I can trace it. It seems quite strange that they all were born with cataract.

Dr. S. G. Dabney: Dr. Ray's report is very interesting indeed; five cases of congenital cataract in the same family. It is remarkable to what an extent heredity influences certain diseases of the eye. A few years ago I reported to the Louisville Medical Society cases of retinitic pigmentation occurring in four successive generations of the same family.

In regard to cataract I had rather an odd experience recently. I saw a child about eight years old whose eye had been operated upon in the same manner as described by Dr. Ray. The mother had never been satisfied, and thought the child had not received any thing like the benefit from the operation that she ought; really it was because she had neglected to have the proper glass adjusted. I fitted it with a glass, and the patient is now able to see very well. I operated upon the other eye for similar trouble, and have just about finished it now, with perfect result.

Dr. J. M. Ray: Concerning the hereditability of the disease retinitic pigmentation, it has been thought to be the result of consanguineous marriages more than any thing else. I saw a woman yesterday having acute glaucoma in one eye; I operated on her sister six months ago for the same trouble; the sister came to me at the college dispensary with absolute glaucoma, having occurred primarily several years before. She had repeated attacks which led to complete blindness. At the time I saw her the eye was sightless, and I advised her to have it removed, as it was very painful. I prescribed eserine which gave her almost immediate relief. I was called to see her sister in consultation on Tuesday evening; found her suffering with acute glaucoma, and advised an immediate operation. This was refused, and she said she wanted some of the drops such as I gave her sister. I told her I thought she was losing valuable time; that an operation was demanded, and that immediately. I gave her some of the drops, but they did not give the same relief as in the former case.

Dr. S. G. Dabney: An old gentleman came to me last fall from another city; he was led into my office by a boy about fifteen years old, and I took it for granted, of course, that the old fellow who was being led in was the patient. He said he was uneasy about the boy's eyes. He then gave me this history: He said he himself lost his sight about thirty years ago with glaucoma; that his oldest son when about eighteen years of age had lost his sight with glaucoma, and he believed the boy he had brought to me also had the disease; and he evidently did have a typical case. I gave him an unfavorable prognosis, as the case was already chronic and of long standing, but advised that an operation be done at once. The old gentleman said he had had the operation of iridectomy performed on himself, as well as on his oldest son, but both of them had lost the sight of both eyes. Nevertheless I advised this operation as I thought it was the only chance. I think his intention was to see other oculists; do not know whether he did or not.

It was a remarkable instance of glaucoma
occurring in three members of the family, also occurring in the two cases at such an early period in life.

Dr. D. T. Smith: In the matter of the influence of consanguineous marriages: This is a subject that I have taken considerable pains to investigate. At one time you know it was regarded as almost criminal to contract consanguineous marriages. There is no doubt that this feeling to a certain extent should exist in order to prevent improper marriages. However, for the last several years the fever has died out, and I believe that justice is being done by thoughtful men on that subject. I think now it is universally accepted by men who are capable for deciding in matters of this kind that marriages of blood relations, unless there are physiological reasons to the contrary, are entirely safe. We all know that great perfection in the development of extra qualities has been attained by in-and-in breeding among the lower animals.

Dr. T. H. Stueky: I simply want to continue report of a case. You will remember at a meeting of this Society several weeks ago I read a paper on the subject of Sarcoma of the Mamme in a girl thirteen years of age. One breast was removed on account of sarcomatous growth. The other breast is now becoming involved and will soon have to be removed.

Dr. D. T. Smith: A gentleman about thirty years of age came to my office, stating that his health had been fairly good, with the exception that for a week he had had some pain in the epigastric region which lasted a short time at first, and would then return with more severity. He had a very unfavorable look about his face, nutrition seemed to be very much impaired, and I felt that the case was rather more serious than he seemed to anticipate. I prescribed an anodyne for him as he was suffering some pain. After a short time I was called to him, and finding him in severe pain, prescribed four grains of morphine in a mixture of two ounces, with instructions to take a teaspoonful every half hour until he was relieved. This was about ten o'clock in the morning. About two or three o'clock in the afternoon I was again called to see the patient. The pain at this time was intense, and he was evidently passing gall-stones.

I gave him two doses of the mixture of morphine, and told him to remain in bed until he got relief. About seven o'clock that evening he became quiet; he had taken then about three grains of morphine, from ten o'clock in the morning until seven at night. He had also taken a little turpentine and ether, I believe one dose of each. He passed through the night very comfortably, using hot cloths over the seat of pain. The next morning when I saw him he was breathing only about two and one half or three to the minute; pupils were contracted, just as we would expect to find in morphine poisoning. This stupor came on only late at night. I used artificial breathing, and after a short time left him; did not think the conditions justified any very great apprehension. About eleven o'clock that morning I saw him again and his condition was little better. About nine o'clock that night Dr. Anderson saw him with me, and he was still in a partial stupor, slow breathing, delirium, and a little fever; temperature 101.5° F.; he again began to complain of pain in the region of the liver. The second morning the stupor was still present, though not so marked. I knew that the effects of the morphine had entirely passed off, and believed it was some products of the liver that were producing the poisonous effects. After a week he was able to sit up, and is now slowly recovering.

It was rather remarkable that this patient should have had symptoms so nearly resembling morphine poisoning. I had no doubt in the morning, but the intense pain having passed off, it left a weakness which allowed the morphine to assert itself. The smallness of the pupils would seem to indicate this. We believed the stupor remaining after the effects of the morphine had passed off was due to the absorption of some of the elements of the bile by the abraded surfaces of the duets.

Dr. W. Bailey: I am not surprised that Dr. Smith thought the influence was due to morphine, and I am inclined to believe that the symptoms were due to morphine, primarily at any rate. I do not think that the absorption of cholesterine would give a respiration of two and one half or three to the minute. I am satisfied that in a person not accustomed to it three grains of morphine
are quite sufficient to account for the narcosis that was present. I think it can be established that while persons are suffering intensely with pain, such as characterizes the passage of gallstones or gravel, they can bear a great deal of opium without any evidence of opium narcosis; but suddenly being relieved of pain (which is a physiological antidote to opium) by the gallstone passing into the duodenum or the gravel into the bladder, all the evidences or symptoms of opium poisoning will then develop. I think we should be extremely cautious about the amount of morphine we have ready for either absorption or for action when pain should terminate. I think oftentimes we are pushing and crowding a remedy up to that point that as long as pain exists it is safe, but when pain shall terminate by cessation or removal of the conditions, then that amount of opium given during the existence of pain becomes a dangerous element in its action.

I am well satisfied from the history of the case as given by Dr. Smith, if I may be allowed to criticise the case, that it was opium poisoning, at least primarily, the influences not being fully exerted until after the patient had gotten sufficient relief to go to sleep; until the conditions opposing the action of the morphine were removed, then the toxic influences were developed. Something in the late part of the case of course might have been due to the absorption or may be from retention of the poison in the blood. But with a contracted pupil, with respiration of two and one half or three to the minute, and with the administration of three grains of morphine, I am irresistibly drawn to the conclusion that much of the manifestation was due to morphine, whatever may have developed or whatever may have existed later on.

Dr. R. C. Chenault: I was going to say that I could reconcile the seeming differences between the two gentlemen. Every one who is at all familiar with the administration of morphine or opium knows the dangers in it; first, the stimulating effects, then afterward the tendency of opium we all know is to lock up all the secretions except that of the skin; therefore the position taken by Dr. Smith, and the position also taken by Dr. Bailey, in my mind, could be very well reconciled. The effect of opium stopping the secretions, which has a tendency to leave the patient in that condition so common as described by Dr. Smith in the last stages of this case, is satisfactory to my mind that there may have been some poison in the blood from the effects of the opium.

Dr. D. T. Smith: I believe that the condition of the pupil must have been due to the morphine. I think the depression was either produced or greatly influenced by it. The length of time (twenty-six hours) after the morphine had been stopped, and the delirium which lasted three days thereafter, showed that there was something in addition to the morphine.

**Correspondence.**

**LONDON LETTER.**

[From our Special Correspondent.]

*Criminal Anthropology; The Opium Traffic; Australian Treatment of Snake-bite; A Crowded Churchyard; Thymol in the Treatment of Filaria Sanguinis Hominis; Progress of Cremation at Woking; The Retirement of Sir Joseph Lister.*

At the meeting of the British Association Dr. T. S. Clouston discussed the question of "Criminal Anthropology." He said that criminal anthropology had not been studied in this country on scientific lines as it has been in Italy, France, and Germany, although Dr. Bruce Thompson, Dr. David Nicholson, and Dr. Wilson had been early in the field and had done good preliminary work. Dr. Clouston thought that the time is very near at hand when some knowledge of it will be required of all medical men, lawyers, and prison officials. Every student of the subject should have before him the three great factors: first, the heredity of the criminal; second, the actual brain with its reactive and resistive qualities in each case, and third, its environment with its permanent and immediate effects. The brain cortex must be regarded as the vehicle of the goodness of the saint and the badness of the criminal. After making criminal anthropology a special study, one conclusion was forced upon him, and that was that criminals, as a class, fell far below the high and ideal
standard of brain and body. The weak point in criminals had been weighed, measured, and described; the classes of society from which most of those criminals came had not been subject to the same process of scientific investigation as the criminal himself. The scientific method of the future must be to apply tests to the whole masses of the lowest class of society. Dr. Clouston thinks that scientific criminal anthropology must deal with the idiot, the vagrant, the ne'er-do-weel, the prostitute, the epileptic, and the insane as well as the criminal and the class from whence he came. If the study established physiological and hereditary connection between the classes, the criminal would have to be treated more from the point of view of some of the above classes and not from the merely punishing point of view.

There is a large section of the community which considers the opium traffic of India, which is sanctioned by the Government, a disgrace to civilization, and is constantly urging the Government to take steps to suppress the iniquity. To these enthusiasts Dr. Lawrie's report for the medical department of Hyderabad will not be acceptable reading. He is of opinion that in India, at least, the opium habit is absolutely beneficial. It is a blessing rather than what it is constantly being said to be, a curse. "An immense number of people in that country," he says, "owe their health to opium, and would not only fall an easy prey to disease, but would actually suffer in general health if they did not take it." Its action in averting fevers and other maladies incidental to a change of climate is conspicuous.

At the recent Nottingham meeting an Australian medical man mentioned that the Australian natives in cases of snake-bites employ a very simple remedy which is uniformly effective. The process being as follows: A piece of human hair string, which is made up as strong and as fine as the best whicpeord, is tied as tightly as possible three or four inches above the region of the bite, then a circle round the bite is cut with a sharp stone knife about an eighth of an inch deep and a quarter of an inch from the two fang punctures; when this is done the native slits the largest vein below the bite so as to let as much blood as possible out of the limb below the string, and keeps a stream of water running on the limb just above the affected part, rubbing the limb down all the time as hard as possible. This rubbing is kept up for about twenty minutes, till every drop of blood seems to be got out of the wounded portion. Then the slit vein is stitched up, with a piece of sharp thin wood, some dirt is dabbed on the wound, and the string undone.

At an inquiry held by Dr. Hoffman, H. M. Inspector under the Burial Act, it was stated that a metropolitan churchyard had been used for interments during the last six hundred years. During the present century, fifteen thousand burials had been made in it. It was partially closed in 1872 by an order in Council, but though no new graves have been permitted since, burials have been allowed in the old graves, these have gradually dwindled down from forty-one in 1881 to twelve last year. It was stated by the sexton that in opening the old graves portions of human remains had been dug up, and that the graves were nearly all full of water. A similar condition of things existed as regards the vaults, in which the coffins could be seen floating about. It was found to be a significant fact that the churchyard, at one time upon the same level as the surrounding land, is now four feet above it. The soil of the churchyard is a dense stiff yellow clay, and there is no artificial drainage.

Dr. A. Crombie has recently found the administration of thymol internally not to be of use in the treatment of filaria sanguinis hominis. In one case he commenced by giving five grains of the drug three times a day, and quickly increased the dose until at the end of a fortnight the patient, a youth aged eighteen years, was taking two hundred grains daily. This large dose produced practically no effect on the patient beyond a little giddiness during the three days on which two hundred grains were administered daily. In another case the patient was a much older man, aged sixty-seven. Upon examination his blood was found to contain filaria sanguinis, about four to each drop. On the 15th of March Dr. Crombie commenced giving him five grains of thymol thrice daily, rapidly increasing the dose to fifteen grains four times a day. This dose gave rise to a sensa-
tion of heat down the esophagus, but beyond this the patient could manage to take forty-five grains daily without inconvenience. At the end of a fortnight of this treatment the filaric were found both active and in considerable numbers. Dr. Crombie concludes that, though thymol is of the greatest possible use in the treatment of tapeworm and the smaller intestinal worms, its use must be abandoned as a cure for the parasites of the blood.

The conversion to cremation as a form of sepulture in this country is slow, although progress appears to be being made. According to the latest report in 1885, when the Woking Crematorium was instituted, only three bodies were sent, in 1886 ten, in 1887 thirteen, in 1888 twenty-eight, in 1889 forty-six, in 1890 fifty, and in 1891 ninety-nine. Thus every year has shown a slow but steady progress. The charge at Woking is five guineas, including the services of an attendant, use of chapel and waiting-room, and an urn for the preservation of the ashes. The railway company's charges are an extra, and the local clergyman's fee is a guinea if the burial party does not provide its own cleric. The ashes can be either buried in the grounds at a fee of one guinea, or preserved in the chapel of the crematorium, or they may be taken away. Two medical certificates are required to show cause of death, and one at least of the doctors giving such a certificate must have attended the deceased in the usual manner; it must also be stated that the deceased has expressed no wish contrary to the carrying out of this form of burial. It usually takes about an hour and a half to cremate the body, and the process must be performed three days after death took place in London, or four days in the country. Any one interested may visit Woking and see over the place provided no cremation is going on.

On account of the retirement of Sir Joseph Lister from the chair of Clinical Surgery at King's College Hospital, the professorship of Systematic Surgery, which has been held conjointly by Professor Rose and Professor Watson Cheyne, is now occupied solely by Professor Cheyne, while Professor Rose has been appointed to the chair of Clinical Surgery.

London, August, 1892.

Abstracts and Selections.

The Pathogeny of Cholera.—The toxic theory of Professor Bouchard, as set forth in his book "On the Auto-intoxications," fairly well explains the symptomatology of cholera. He demonstrated as early as 1884, by experiments made with toxic substances found in the stools and urine of cholera patients, that the pathogeny of cholera may be referred to multiple intoxications.

Professor Bouchard has some doubts as to the fact of the common bacillus being the pathogenic agent of cholera. "The only serious argument," he says, "in favor of Koch's claim is the presence in the intestines of cholera patients of special micro-organisms which are not found in the intestines of healthy persons or of persons affected with other diseases. These micro-organisms exist often in considerable abundance from the very first, and often to the exclusion of every other microbe in the digestive tube. Apart from this empirical ascertainement, which warrants only a presumption, all the other arguments which have been alleged are illusory.

The toxic alkaloids which Bouchard has extracted from the intestines and urine of cholera patients greatly exceed those ordinarily contained in fecal matters. One of these, which forms acicular crystals, seems to have a special virulence, and to be identical with the "cholera poison" which Koch and Brieger have isolated from the intestinal contents of cholera patients, and which they believe to be generated by the comma bacillus. There is, however, no agreement as to what really are the soluble toxic substances secreted by the microbe of cholera. Bouchard affirms that the real virus is eliminated in the urine in appreciable quantities. In injecting into the veins of animals cholera urine he has caused a pronounced cyanosis, collapse, albuminuria, anuria, cramps, and pale, yellowish or bloody diarrheic evacuations like those which characterize true cholera. In injecting the alcoholic extract of the urine of cholera patients he has determined somnolence, albuminuria, diarrhea, and death in two days.

"There is," says Bouchard, "in cholera urine a poison which I call the true cholera poison. I cannot chemically define it. I only know it by its physiological properties. I know not if it is fabricated by the sick organism or by microbes."

Bouchard's view then is that besides the primary infection there exists in the pathogeny of cholera a secondary intoxication consequent on the infection. He thinks that the symptoms
considered as characteristic of cholera are the result of this intoxication. To this we may attribute the cyanosis, the chilliness, the respiratory troubles, the hicough, the special diarrhoea, the intestinal desquamation, the cramps, the dehydration of the blood and tissues, the albuminuria, the auria. But very soon 'there supervenes a new source of systemic intoxication superadded to the first, and this clinically expresses itself by intellectual torpor, by somnolence, apathy, and coma. The respiratory rhythm changes, sometimes rising, sometimes falling. It is the rhythm of uremia. The pupils are contracted and become punctiform.'

This is evidently a different symptom aggregate from that of the initial period, and is due to another kind of poisoning. In other words, we have the clinical tableau of uremia from excess of disassimilation and blocking of the kidneys.

"In short, cholera furnishes us an example of a double auto-intoxication. By an abnormal product, this is the choleraic intoxication properly so called; by normal products, constituting a variety of uremic poisoning.'

The nervous theory of Marey has always had advocates. He considers the nervous system as primarily affected by the cholera poison, and as determining the principal phenomena of the attack, even the gastro-intestinal symptoms. The cholera poison, according to Marey, first excites the sympathetic system, whence ensues the constriction of the muscles under the dependence of that system. The spasm of the arteries of the greater and lesser circulation, as well as that of the bronchial rachis, explains the phenomena of the cold period. In the period of reaction the arteries and capillaries relax, and there is stasis of the circulation and excessive watery exudation.

The cardiac theory, defended by Euleenburg, Francois, Franck, and others, attributes the cholera algidity to cardiac adynamia provoked by nervous irritation proceeding from the intestine. This theory derives support from the experiments of Tarchonoff and Franck, who have shown that irritations of the digestive tube and mesenteric nerves may determine a more or less prolonged arrest of the heart.

The intestinal theory has very many advocates. It lays stress on two principal factors, the dehydration of the blood and tissues, and the blood poisoning.

Under the influence of the profuse watery discharges, provoked by the intestinal lesion, the blood and tissues became unfit for nutrition and functional work.

The toxins secreted by the microbes in the intestine have a part in determining the cramps and the algidity. The final symptoms are essentially those of uremia due to suppression of the renal function.

It will be seen that the third theory is not out of harmony with the first, and may be considered as only another form of stating Boucharl's theory.

"From the study of the various attempts of pathologists to explain the symptomatology of cholera, it results that we must admit multiple causes. If the most powerful come under the head of intoxications, we must still make due account of the dehydration of the blood and tissues, and of the reflexes which take their start in the digestive tube and affect the vasomotors. In favor of this latter influence may we not refer to the algidity and collapse which sometimes follow the gastric crises of tabs, and which bear so striking a resemblance to cholera?"—_Boston Medical and Surgical Journal._

**ARISTOL IN GYNECOLOGY AND ABDOMINAL SURGERY.—Dr. C. D. Palmer, in a communication to the Cincinnati Academy of Medicine, September 14, 1891, said: "Aristol adheres very readily to the skin or surfaces of wounds and burns. While similar in its general specific action to iodoform, it has the valuable property of forming an absolutely unirritating covering over surfaces upon which it is placed, under which the processes of granulations and cicatrization proceed with extraordinary rapidity. Not absorbed, it has no toxic effect. It possesses stimulating, alterative, and anesthetic properties."

"It is not my place to speak of its therapeutic powers in dermatology, except to make mention that these diseases do not unfrequently affect the external organs of generation of females. Ulcerations of various kinds—varicose, epitheliomatus, or carcinomatus, syphilitic, etc.—are especially influenced favorably by it. I use aristol in pure form, applied by insufflation, except when placed in narrow canals, like the female urethra, or in the bladder or uterus. Within the rectum it can be utilized, as within the vagina, by insufflation and by suppositories. It becomes an admirable dry dressing for some cases of chronic vaginitis, vulvar pruritus, cervical endometritis, cervical erosions and fissures, mammary fissures, and syphilis, primary and secondary. It has been my habit for years, in all cases of tracheoplasty, colpoprrophy, and perineorrhaphy, as well as for vesico- and recto-vaginal fistulae, to dust some iodiform powder or to apply a dry tampon of carbolized gauze after the operation; now I consider the aristol application as superior. I am well satisfied that aristol powder applied over the sutured abdominal walls in all cases of ovariotomy and after all abdominal
sections is much better than any wet dressings or any dry dressings with iodiform. Cravons of aristol may likewise be profitably utilized in certain cases of general endometritis and after curettage of the uterine cavity.

"Probably the dry dressings of aristol, with absorbent cotton or wool, are quite useful in some cases of chronic pelvis cellulitis and pelvic peritonitis attended or not with pelvic abscesses. For the after-dressing of vaginal hysterectomy it is the remedy, as well as after mammary amputation. Aristol gauze may be made by impregnating plain gauze with an ethereal solution of aristol, containing from one to two grams of aristol per yard. Cravons for the urethra or uterus can be prepared by using at least one gram mixed with a sufficient quantity of gelatin or gum acacia."

In a discussion following the reading of Dr. Palmer's paper Dr. Marcus said that, in a number of cases of varicose ulcers of varying degrees of severity, aristol had given him more cause for congratulation than any remedy yet used by him in that class of cases. Applied as first suggesting itself, in ointment form with vaseline as a base, the result was nil. He then adopted the following plan: The ulcers were cleaned and all scales removed and moisture dried with absorbent pads of cotton, then dusting the aristol freely over the entire surface, placing over all a thin layer of absorbent cotton, and penciling the entire dressing with elastic collodion. The result in most cases was gratifying, and confirmed for the speaker a half-formed opinion that grasses and sallows were not conducive to healing in varicose ulcers.

Dr. Palmer said he was pleased at the lively interest his paper had provoked. He would now refer to but a few points raised in the discussion. Aristol, in his experience, had proved itself to be one of the best remedies we possess for varicose ulcerations. It will not cure the varicosities of the veins, but it rapidly heals the varicose ulcerations resulting from the varicose veins. He had made the applications very much as suggested by Dr. Marcus, applying freely the powders of aristol twice daily, and adjusting over this application a pad of absorbent cotton retained by a well-fitting bandage.—Cincinnati Lancet Clinic.

Insanity Caused by Inhalation of Sulphuretted Hydrogen.—1. B. H., aged thirty years, was admitted into Rainhill Asylum, September 20, 1888. There was no history of insanity in the family. The patient himself was said never to have had any illness, but he appears to have drunk somewhat. He was a single man and a laborer in some chemical works. On the morning previous to his admission into the asylum he went to his work as usual. About 9 a.m. he was observed to be acting strangely, throwing his arms about wildly and shouting. In addition he lost power over his legs. As he was engaged in an occupation which exposed him to some chemical fumes (probably sulphuretted hydrogen), it was supposed, apparently with very good reason, that he had inhaled the gas. He remained excited and rough all that day, laughing and shouting by turns, and did not appear to recognize his brother. When admitted into the asylum on the following day he was in a very maniacal condition, shouting and throwing himself about, and it took several men to carry him to the ward. He kept throwing his arms about, but was distinctly unsteady on his legs when made to stand. In bed he wriggled about, throwing his head back on the pillow, and waving his right arm round and round. This condition of things lasted for two or three days, when he became more quiet; and he then gradually passed into a taciturn, depressed state, sitting or standing about for hours doing nothing, and never speaking except when addressed. After remaining in this condition for many months he gradually developed delusions of persecution and interference, and became very dangerous, making assaults on those around him. This condition of things lasted for upward of a year; but during the last few months an improvement has set in, and at the present time, although apparently not altogether free from delusions, these are nevertheless much less prominent; and though still excitable and talkative, he is much more tractable, and is regularly employed outside labor. It is improbable, however, that he will ever fully recover.

2. R. H., aged thirty-two years, was admitted into Rainhill Asylum on January 27, 1890. He was a married man with three children, and was employed as an engine man on some chemical works. He had always been healthy and temperate, but shortly before the onset of the mental affection he had had an attack of bronchitis which kept him at home for about ten days. While at his work a few days after this he accidentally inhaled sulphuretted hydrogen and became "cossed," as it is called at the chemical works. This produced headache, stupor, and prostration, for which he was kept at home for a few days, when he became delirious. He passed rapidly into a very violent excited state, shouting and gesticulating; said he was Jesus Christ; etc., tried to bury his head in the floor, and to raise his feet above his head. When admitted into the asylum, three days later, he was still very violent and excited, gesticulating, and talking incoherently chiefly on
religious subjects. He continued in a maniacal condition for two or three weeks, but at the end of a month from admission he had distinctly improved; he had then become rational and was working fairly well. The improvement continued and he slowly recovered mental vigor, and was discharged recovered on June 27th, just five months after his admission into the asylum.

Remarks. I have grouped these two cases together, although it is not quite certain that in the first case the gas which affected the patient was sulphuretted hydrogen, details being wanted as to the exact fumes to which the man had been exposed. That he had inhaled gas of some sort is, however, I think pretty clear from the history, and there can, I think, be little doubt that sulphuretted hydrogen was the agent in question. That it was so in the second case is clearly stated in the history obtained from the patient's friends. There was a good deal of similarity between the two cases as regards the symptoms presented at the onset, there being in both a greater amount of muscular excitement than is usual in ordinary mania, and both men exhibiting a curious tendency to roll the head on the floor or pillow.

Laborers in chemical works are quite familiar with sulphuretted hydrogen gas and its usual effects on the system, for it is not by any means unusual for persons exposed to its fumes to become "gassed," as the saying is; that is, they pass into a condition of insensibility which lasts a variable time, and when coming round they are very often sick and dazed, and have a sense of oppression about the chest, and there is often a good deal of prostration for a day or two afterward. Sometimes, indeed, although very rarely, the insensibility ends in death. It is, however, very unusual for lasting or permanent effects to be produced upon the nervous system such as come under the designation of insanity. Indeed, I am not aware that any such cases have been recorded before. It does not, however, appear to me matter of surprise that such effects should at times occur. That the gas has powerful narcotic properties is evidenced by the rapid insensibility it produces when inhaled in any quantity. Cases have been recorded by Savage and others in which insanity, generally taking the form of mania, has resulted from the inhalation of chloroform, ether, nitrous oxide gas, and other similar agents, and the cases just described as produced by sulphuretted hydrogen seem quite to fall into line with these.

The effect of all these agents appears to be to paralyze, in the first instance, the highest controlling and co-ordinating plexuses in the brain. If the dose be large or the administration continued, more and more of the cortical centers in a descending series are involved, and insensibility ensues. But when the paralysis is confined to the highest cortical arrangements, the immediate result is not lethargy but excitement, owing to the centers next in series being emancipated from the control of the higher, and hence acting over-vehemently and incoherently. Such, at least, is the explanation which I have to offer of the pathology of these toxic cases, which are hence assimilated to the more ordinary forms of mania which we meet with in practice.—Dr. J. Wigelsworth, British Medical Journal.

The Study of Umbilical Infection in One Thousand Infants.—In the Archiv für Gynäkologie, Band xxi, Heft 3, Fröss publishes his results from the study of umbilical infection in one thousand infants. Careful measurements of temperature in these cases showed a large number of febrile patients, in most of whom no disease was evident. In only 32 per cent were normal and undisturbed drying and cicatrization of the cord and umbilicus observed. In 14.7 per cent inflammation of the connective tissue about the umbilicus was present.

After comparing various methods of treating the cord it was found best to leave it not longer than three fourths of an inch, to ligate with linen tape which had been thoroughly impregnated with bichloride of mercury, and to envelop the stump in a dry dressing of a piece of clean, dry linen cloth. It was also found useful to cleanse the tissue about the umbilicus with 1-1,000 bichloride, envelop the cord in sterile cotton, and cover the dressing with sheet rubber to protect it from contamination. It is better not to bathe an infant by dipping it into water until after the umbilicus is healed.

Although gangrene of the umbilicus rarely occurred, yet septic infection through this channel, with subsequent complications, was not infrequent. The mortality from this source in two large clinics is stated at 25 and 30 per cent. Of these, 70 per cent showed no symptoms of external inflammation, while 50 per cent presented inflammation of the umbilical vessels.

In preventing umbilical sepsis the greatest importance is laid upon a rapid and complete drying of the stump of the cord. Next in value is thorough cleanliness. In hospitals, those nurses who attend lying-in women should not care for their infants; all obstetric nurses should pay especial regard to the antisepsis and cleanliness of the umbilical region of the newborn. It is curious to observe that the mothers of these infants showed no signs of puerperal sepsis.—American Journal of Medical Sciences.
Reflexes in Hip Disease.—Brackett draws the following conclusions from the comparative study of forty-seven cases of hip disease and twenty-one of spinal caries. The condition of the reflexes of the patellar tendon depend on the same general causes as the muscular spasm. When muscular spasm is absent the reflexes are not altered. If, however, the joint is irritable we may expect to find the reflexes increased on the diseased side. "The presence of subjective symptoms does not apparently affect the phenomenon. The value of this is two-fold: it becomes an indication of the irritability of the joint in the absence of subjective symptoms in the same way as does the involuntary muscular spasm, and also of diagnostic value in the early stages in the absence of other indications. In this it can be used as one of the evidences in distinguishing between early hip and low lumbar caries, for a marked difference is shown in the case of spinal caries in this matter of reflexes, as these show an almost constant uniformity, and are not only equal but much less likely to be exaggerated even with the presence of other disease." In old cases with marked atrophy the value of this sign is doubtful. It is simply one valuable sign in determining the condition of the joint, but not an infallible one.—Boston Medical and Surgical Journal.

Metastases of the Enteric Fever Bacillus.—Rosin and Hirschel (Deut. med. Woch., June 2, 1892) say that in the various suppurating metastatic foci in enteric fever typhoid bacilli alone or mixed with the ordinary pyogenic organisms have been found. In the urinaces and abscesses seen during convalescence from enteric fever the staphylococcus, and but rarely the streptococcus, has been found alone by one of the authors. A case of enteric fever is then reported in which there appeared about the twentieth day a swelling of the size of a five-mark piece near the tuberosity of the left tibia. There was also edema of the left foot and leg. An incision was made into this swelling. No pus came out of it, but a piece of necrotic tissue was found in it. Cultivation experiments amply proved the micro-organisms present to be Eberth's bacillus alone. The authors could not absolutely exclude the periosteal origin of the swelling, but the infiltration was apparently in the muscle substance. The thrombosis of some important vein produced the edema. The authors suggest that in the cases of suppuration where typhoid bacilli have alone been found other micro-organisms being less resistant may possibly have perished. It has, however, been shown that injections of typhoid bacilli may produce an abscess, and it is possible that under certain conditions the micro-organisms may produce suppuration in the human subject. The above case shows that typhoid bacilli may cause an infiltration which does not break down into pus, and which gradually disappears.—British Medical Journal.

The Therapeutic Action of Kola.—Dr. F. Combemale presents an exhaustive study of this remedy, which contains 2.948 per cent of caffeine (Heckel and Schlagdenhauffen). Dujardin-Beaumetz has used it with good results in cardiac asystolia; Huchard believes it to be valuable in cardiac diseases when there is weakness of the myocardium; it is certainly useful in the diseases of the heart as a diuretic. As Fossagrives has pointed out, this is a true tonic, not only so far as concerns muscular effort, but as well intellectual work. It may replace quinine in adynamic diseases, and can be associated with alcohol in the treatment of infectious diseases. It is valuable in neurasthenia, and in convalescence from epidemic influenza. Firth believes it to be of the greatest value in treating alcoholism. Hamilton asserts that it is a remedy against certain symptoms of seasickness (depression, vomiting, vertigo). Chambord-Hénin has used it with brilliant success in a case of confinement, when it prevented syncope. It can be administered as a tincture or a fluid extract, with equal parts of the same preparation of coca. According to Huchard, thirty drops three or four times daily, but not at night, because of the insomnia which it causes.—Bulletin Général de Thérapeutique; Amer. Jour. Med. Sciences.

Vomiting in Chloroform Anesthesia.—Passet (Münch. med. Woch., June 7, 1892) says that the chloroform vapor acting on the mucous membrane of the mouth produces a flow of saliva. This saliva is swallowed, and a certain part of the chloroform is thus conveyed into the stomach. The gastric mucous membrane is in this way irritated, and vomiting is set up. This increased flow of saliva at the beginning of the administration may be seen in animals, especially in cats, as well as in the human subject. For some time after the anesthesia chloroform is exhaled with the breath, and even this may irritate the mucous membrane of the mouth in the same way, and with the same result. The action of chloroform upon the stomach varies in different individuals. The author avails that the only rational way of preventing the vomiting is to avoid the swallowing of chloroform, and that this may be done more easily than might appear by directing the patient to spit out the abundantly secreted saliva.—British Medical Journal.
THE AMERICAN PRACTITIONER AND NEWS.

The American Practitioner and News

"NEC TENUI PENNA."

Vol. 14. SATURDAY, AUGUST 27, 1892. No. 5

D. W. YANDELL, M. D., } - - - Editors.
H. A. COTTELL, M. D. }

A Journal of Medicine and Surgery, published every other Saturday. Price $3.00 a year, postage paid.

This Journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

Books for review, and all communications relating to the columns of the Journal, should be addressed to the Editors of the American Practitioner and News, Louisville, Ky.

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THE CHOLERA.

As prophesied in a recent issue of this journal, cholera has jumped all the obstructions put in its way by the enlightened and far-seeing nations of Western Europe, and now has England and the Continent by the throat.

Its appearance in Hamburg, Antwerp, Havre, and London during the last ten or fifteen days is sufficient to show that quarantines, as exercised by political and military power, are no match for the invader. To any prophet who reads the future by the past, it is evident that the appearance of the scourge in New York is a thing of the near future, and that its diffusion over the States is only a matter of time, and probably a very short time. Some hope is to be found in the lateness of the season, and the probability that frost will kill the germ; but if reports of former epidemics may be trusted, frosts, and even the snows of a vigorous winter have sometimes failed to stay the march of cholera.

We are not about to pose for a Cassandra, nor do we look with morbid fondness upon the dark side of the picture; but the prospect for a later if not an early invasion of our fair land by the Asiatic scourge were never better than now, and it behooves every physician who loves himself, his kin, and his kind, to wake up to the fact, and to bestir himself and all who may come under his influence to his and their solemn duty in the case.

Cholera respects no season, time, or race, it laughs at quarantine, and marches through shot-gun cordons without descending to give the countersign. Landed within the gates, it proceeds to its work of death, and no combination of simples, charms, protestations, or prayers can snatch one victim from its grasp. It comes to desolate and to destroy, and only those escape whose vitality is sufficient to withstand the strain, or who are wise enough to take proper sanitary precautions against the enemy. These he respects, and no others; and the city, hamlet, or town that neglects these will pay the penalty in a sadly diminished census.

The physician's duty in the case is plain enough. Let him speak as science gives him authority, and cease not to preach to all who come within his sphere of influence the gospel of public and personal hygiene.

Clean up, scour, wash, dry, whitewash, burn, and by every other means possible get rid of pabulum that may serve as a nidus for the growth of the deadly microbe. Furthermore, let him counsel his clientele to see that no germs of the disease are permitted to enter their alimentary canals. Drink no unboiled milk or water, eat nothing raw in fruit, vegetables, or meats; eat or drink nothing in short that has not come fresh and hot from the fire, and eat this only with disinfected hands, and on dishes that have with the food passed through the fire.

Knowing what we know, since Koch and others have studied cholera in the light of modern science, it is certain that the disease can not spread without pabulum for the proliferation of the germ, and those who are wise enough to leave in their surroundings nothing for the bacillus to feed upon, may stand behind such hygienic intrenchment safe from harm, while cholera does its work of death upon the ignorant, the indolent, and the unwashed.

The Next International Medical Congress.—The last week in September has now been definitely fixed upon as the date for holding the International Medical Congress next year at Rome.
Holes and Queries.

State Board of Health of Kentucky: Precautions to be Used against Cholera. Asiatic cholera is again on its deadly march westward. Heretofore, with one exception, cholera in western Europe has always been followed by an epidemic in this country, and so far Kentucky has never escaped the disease when it has gained a foothold on this continent. The disease, as now reported in France, Germany, and Russia, presents the same threatening aspect that it has in former years preceding its introduction into this country, and while it is entirely possible that we may escape the disease this year, it must be admitted that the facilities for its importation are much more numerous and rapid than ever before, and that the history of former invasions warrants the opinion that its reappearance here is probable at any time. Under these circumstances it becomes the duty of this Board to call the attention of those intrusted with the administration of sanitary laws and the public to the best known methods of preparing for and combating the disease.

The experience with former epidemics of cholera, in the light of modern research, has demonstrated the fact that there are three essential factors necessary to its prevalence as an epidemic in this country: (1) The contagium or specific germs of the disease transported more or less directly from their only place of origin in India. (2) Human beings afflicted with the disease in some of its stages, or clothing or merchandise infected by such persons, to carry these germs from place to place. (3) An inhabited town or place, properly prepared by the neglect of health requirements for the reception of these germs. A consideration of these factors naturally suggests the methods which would seem most successful in combating each of them.

As cholera has its origin only in India, and must be transported to this country in ships, it is conceded by all scientific sanitarians that an intelligently conducted quarantine, which would question the freedom from the disease of all travelers, immigrants, baggage, and merchandise before embarkation or shipment from European ports, the strict surveillance of all suspected persons or things on their arrival in this country, would effectually protect us from the ravages of this disease. A quarantine thus conducted would be a help rather than a hindrance to commerce. After the last great epidemic of cholera and yellow fever a National Board of Health was established for the United States, which instituted a system of quarantine and observation of this kind; but the absence of epidemics for the last few years has caused the practical abolition of this organization, and thus imposed the responsibility of protecting this country from exotic plagues on the local officials at the various ports of entry along our extensive sea-board, with such assistance as may be given by the U. S. Marine Hospital. So many weak points exist in this line of defense, and other contagious diseases have so frequently been introduced through some of these ports, as to exclude this method of combating the disease so far as we are concerned at present.

How to Prevent its Spread. Cholera is not contagious in the ordinary sense of that term, and attendants upon those sick with it are rarely attacked with the disease. The infective germ or contagium is contained chiefly, if not entirely, in the matters which the patient discharges from the stomach and bowels, in his clothing soiled thereby, and may be on almost every thing that comes in contact with him. It has been abundantly demonstrated that these discharges are not capable of reproducing the disease when fresh, but that after decomposing for a few hours, especially in the presence of dampness and filth, they become highly infective. Deposited in a foul privy-vault, near a polluted well, or other favoring local conditions of foul air and filth, the germs of the disease multiply with such infinite rapidity as to spread as by explosion. These germs may enter the system by means of the effluvia arising from such places, more frequently in infected water, and possibly sometimes in solid food. This infective property belongs to the discharges of those slightly affected by the disease as fully as to those of its advanced stage.

After cholera gains a foothold upon the continent, its infective cause or contagium is conveyed from place to place along the lines of
human travel, chiefly by those so slightly affected by the disease as to yet be able to travel, or by clothing or other articles which have been in contact with the cholera sick. As even the light and painless diarrhea of the early stage, or light form of the disease, may, under favoring local conditions, infect the earth, the privies, and the water supply, wherever the travelers from cholera districts may go, with our modern facilities for travel its propagation is often very rapid after it has once become epidemic in one of our commercial centers. Then, too, as the period of incubation of cholera often lasts several days, a person may contract the disease in an infected place and travel to a distant one before being stricken down, to become a fresh center from which it may spread.

In view of these facts it is not strange that quarantines which attempt to prevent the importation into healthy districts of those sick with cholera, and things infected by them, have always had a strong hold upon the popular and even the professional mind. Nor, with the difficulty in recognizing the disease in its earlier stages, and the impossibility of detecting it during the period of incubation, is it strange that such attempts have usually proved ineffectual, except on shipboard, where the cases are under observation long enough for the disease to fully develop, and in small isolated places where the quarantine can be made absolute. At any rate this is recognized as being true by the leading sanitarians of this country.

While inland quarantines and the fumigation of trains and travelers are as useless as they are annoying as against this disease, an efficient local inspection service, which attempts to keep those coming into the locality from an infected district under sanitary observation, may be made of the highest value to such persons as well as to the community. The importance of the early recognition of the first case, and of the thorough destruction or disinfection of his dejections and of every thing infected by them, should be impressed on the entire community as well as the medical profession. All the discharges from the body should be immediately and thoroughly disinfected while fresh and harmless, and all cast off clothing, bedding, and other articles soiled by contact with the patient should be promptly disinfected. A knowledge of these well-demonstrated facts, widely disseminated, would not only prevent the spread of the disease, but would do much to prevent the disgraceful panics and cruelty to the sick which so often attend it. Should cholera reach our shores, a brief statement showing what to do in its presence will be immediately sent to all parts of the State, through the local health authorities.

How to Prepare for the Disease. Having shown that no efficient national system of quarantine has been established to prevent the importation of cholera into this country, and that an inland quarantine to prevent its spread is impracticable, it remains to consider the means to be resorted to before the disease reaches your locality. Experience has abundantly demonstrated the fact that cleanliness is the best protection against cholera, as it is against most other sickness. Although the germs of the disease are scattered broadcast during every epidemic, they cease to be reproduced beyond the boundary lines which separate the cleaned, drained, and ventilated premises, from those which are filthy, undrained, crowded, and unventilated. The disease can be, and often is, imported into healthy localities, but the conditions of filth in earth or water being absent, no extended series of cases are produced. In 1873 Louisville prepared for the disease, and had thirteen cases, chiefly imported, while it prevailed as an epidemic in nearly one hundred of the filthy, undrained towns and hamlets of the State.

It was thought that the disease was very much restricted during the last two epidemics in this country by attention to sanitary measures—especially in the large cities, and it is safe to say that our knowledge of the methods of resisting the disease has so greatly increased since then that no city or town which heeds the warning here given need suffer greatly. It should be borne in mind that measures of cleanliness taken beforehand are of far more importance as a protection against cholera than the removal or disinfection of filth after the disease makes its appearance. We would recommend, therefore, that all local boards of health and health officers, and the people themselves, begin at
once the work of putting our cities, towns, and country homes in the best possible sanitary condition.

Accumulations of animal and vegetable matters in the streets, alleys, and yards, and all privy vaults, cess-pools, sinks, drains, cellars, and all other places suspected of being dangerous to health, should receive immediate attention. Tenement houses and all places thickly settled by negroes and the lower classes of whites should be rigidly inspected and put in the best possible sanitary condition, and the inspection should be frequently repeated. In this connection our people should be taught the wide distinction which exists between cleanliness and disinfection. Disinfection, as ordinarily applied to streets, gutters, and premises, by means of carbolic acid and other remedies, without thorough cleansing beforehand, are misleading and utterly useless. They only smell worse than the natural odors given off from such places. Such disinfection doubtless has some value after as thorough removal of the filth as possible, but should never take the place of this.

As the water supply is the most prolific medium for the spread of cholera, all public wells and springs should be carefully looked after by the health authorities, especially in localities where imperfect sewerage and drainage render such sources of supply liable to contamination. Private wells and springs should be guarded against pollution by promptly and properly taking care of all the waste matters of the household.

The powers of health boards to do this work are clearly defined under our laws, and if any resistance is offered, immediate steps should be taken to enforce the law and instruct our people that the public good is paramount to individual convenience and prejudice. After the health authorities have done their full duty, much remains for both public and private protection, which can only be done by the individual or household. Pure water, good ventilation, healthful food, scrupulous neatness of premises and person, regular and temperate habits, and, in fact, every other factor which is conducive to good health furnish the best means of protection against this and all other diseases.

Complaint is frequently and justly made by the local health authorities in Kentucky that the State has made small provisions for the execution of sanitary work or for the proper recognition of the laborious services required. This difficulty is common in the experience of most of the health boards of this country, and will disappear in proportion as the small powers and funds entrusted to them are judiciously used. In the presence of a threatened epidemic, the proper presentation of the necessity for such work for the public good to the city and town councils and county courts will usually readily secure the necessary funds for its execution.

It is important for the public to understand that pains taken and costs incurred in this work will not be wasted whether cholera comes or not. The same unfavorable local conditions which will enable cholera to spread, if its infective germs are imported into the State, are the same conditions which day after day cause and spread other diseases, such as typhoid and scarlet fever, dysentery, diphtheria, and other filth diseases, which though less alarming, because they are more common and slower in their work, are far more destructive to life. The threatened invasion of cholera will prove a benefit if, in preparing for it, we remove the causes of these diseases, which produce a hundred-fold greater mortality in Kentucky than cholera, and, in doing so, instruct our people that the same better habits and methods of living which prepare them to resist cholera will also protect them against our more fatal every-day plagues.

The duty of householders and physicians to give the city, town, and county boards of health having jurisdiction prompt notice of the first and of every case of disease dangerous to the public health, and of such boards to take prompt measures for the restriction of the disease, have been so fully and so often set forth in circulars from this board that they need hardly be repeated here in connection with so dangerous a disease as cholera.

Copies of this circular for free distribution may be had upon application to the board at Bowling Green.

By order of the board:

PINCKNEY THOMPSON, M.D.,
President.

J. N. M'CORMACK, Secretary.
The Origin and Diffusion of Cholera.

Surgeon-General Cornish, of the British service, in a paper on the present epidemic of cholera, describes the spread of the disease, and the similarity to other epidemics:

So far as can be gathered, the epidemic which now threatens the whole of Europe appeared in March or April of the present year in the northwestern provinces of India, attacked with great violence the pilgrims at the great Hurdwar fair, near the source of the Ganges, spread through Cashmere and Afghanistan, reached Persia in May or June, crossed the Caspian Sea, and spread among the population of Asiatic Russia, from whence it is making rapid progress in European Russia. The epidemic since April has traveled in a northwesterly direction, and has covered or overflowed many thousands of square miles of territory. The history of the progress of the great epidemic of cholera of 1829–33 should be closely studied by those who wish to understand the significance of the present epidemic. Cholera history is very apt to repeat itself, and the circumstances which happened in 1831 are therefore very likely to happen again in 1892 and succeeding years. The route taken by the present epidemic is almost identical with that which invaded Europe in 1831.

It is quite a mistake to suppose that since India is the mature home of cholera the disease is everywhere present there and ready to take an epidemic form. An epidemic of cholera follows the same laws in India as in any other country. It is endemic only in certain and limited parts, from which an epidemic advances occasionally, with intervening intervals of uncertain duration. Its progress is influenced by season and atmospheric conditions, and after lasting a period of about three years the epidemic dies out.

Surgeon-General Cornish alludes to Russia's half-civilized acquisitions in Asia as a source of difficulty and danger in this direction. As regards land quarantine and sanitary cordons, which European nations are so ready to enforce against their neighbors, these have never been successful in keeping out cholera. In India, with ample military aid at hand, they have been tried again and again unsuccesfully. The only provisions on which any reliance can be placed are sanitation, a good water supply, efficient drainage, surface soil cleanliness, wholesome food and habitations. The invading cholera, if it does not reach England the present autumn, is, in Surgeon-General Cornish's opinion, likely to do so in 1893. The reported outbreaks at Hamburg and Havre, if true, increase much the danger that the disease may be imported into the United States, especially as large numbers of Russian Jews are constantly coming through the former port to this country. The Marine Hospital Service is now taking active measures to strengthen the quarantine of our sea-board.—Boston Medical and Surgical Journal.

The Requirements of the Illinois State Board of Health.—The Illinois State Board of Health have for some years furnished valuable information on the subject of medical education and medical colleges. In the report published last year by Dr. J. H. Rauch a list of medical colleges in the United States and Canada is given. The total is 148, but of these four do not grant degrees, three have suspended, and four are not recognized by the Board; of the remaining, nineteen are supposed to require four or more terms of lectures and four years of medical study; of these last all but six are in Canada. Twenty seven require four years of study and three terms of lectures; and fifty-five require three years of study and three terms of lectures. By this showing, over one third of the established medical institutions of the country now require four or more years of professional study, and three or more terms of lectures as conditions of graduation.

The State Board of Health has decided that for the purpose of registering in Illinois the diploma, which must be presented to the Board as a warrant for the State certificate allowing the holder to practice, must come from a legally chartered medical institution whose requirements of medical education are equal to that of the majority of the medical institutions of the country. That is, they must require at least three years of study and three regular terms of lectures; and that no medical college can be held in good standing until it has established
its claim by an active existence of at least five years. Graduates of schools not up to the standard must pass an examination in different medical subjects.

The Medical Missionary in East Africa. A Hindoo, jealous of the encroachments of Western civilization on his traditional beliefs, when asked, "Which of all the methods of that civilization do you fear the most?" naturally enough evaded the question, remarking, "Why should I put weapons in the hands of an enemy?" At last he said, "We do not greatly fear the missionary schools, for we need not send our children. Nor do we fear their books, for we need read them; nor their preaching, for we need not listen to it. But we dread the doctors and the women. The doctors are winning our hearts and the women our homes; and when our hearts and homes are won, what is there left of us?" It is, in truth, with the advent of the medical man and the trained nurse that progress has been made in the reclamation of the backward Oriental, and the annals of missionary enterprise would lose half, and more than half of their practical interest if these two factors of their work were omitted from the record. We had recent occasion, in noticing the career of the late Rev. John Lowe, F. R. C. S., Edinburgh, to indicate the immense leverage given to his operations by his skill in the healing art, and how the success that followed his exertions had encouraged the great medical missionary school at Edinburgh to double its activity and to reinforce its service by an increasingly effective contingent of medically trained workers. Nor is it less true that medicine itself is reaping the advantage of such disinterested and really philanthropic activity; and just as the discovery of America enriched our pharmacopeia, so does the steady opening up of "Darkest Africa" and the development of its virgin resources in the vegetable and mineral kingdoms, to say nothing of its wealth in climatic situations, react for good on the means at the disposal of the profession in every branch of therapeutics. It is such considerations as these that give interest to the ceremony of the 14th inst. at Glasgow, where the memorial missionary steamer, the Henry Henderson, built for the Church of Scotland Foreign Mission Committee, was successfully launched by its "godmother" Mrs. A. L. Bruce, daughter of the late Dr. Livingstone. A very numerous and distinguished company, in which all ranks and professions had their representatives, assisted at the ceremony, and the chief spokesman of the occasion, Prof. Henry Drummond, set forth the good service which the steamer was about to enter upon. It will enable the medical missionary to conduct operations among the Makololo and other river tribes of British East Africa, plying as it will between the Chindé mouth of the Zambesi to Port Blantyre, and touching at all the intermediate stations. Mrs. A. L. Bruce added that two other steamers, to assist the further enterprise of the mission, were in contemplation, "so as to perfect the transit service from the Chindé mouth of the Zambesi right up the river." The friendly co-operation in this direction between the different religious sects of the mother country will soon, it is gratifying to think, be an accomplished fact—a prime agent in which desirable consummation can be no other than the increasing medical element in the undertaking, an element which ignores all differences of creed, and which, more than any other force at the service of philanthropy, can say "its field is the world."—London Lancet.

Incidents of the Russian Cholera Epidemic.—From all time the medical profession has been able to find among its members men distinguished no less by human fellow feeling and a high sense of personal duty than by intellectual capacity and scientific insight. We should be guilty of gross injustice were we even to allow that such men were exceptional or other than typical of their class. It is they who have earned for it that honorable position which it now enjoys in all civilized communities. It must also be admitted, nevertheless, that times of panic in the presence of uncontrolled disease, as they have exerted a depressing influence upon the mental and moral force of a population generally, have acted with a like result upon many of its healers. The plague of London acted thus as a discriminating influence. There were those who at
that time bore well the crucial test of their devotion, and there were those who preferred their personal security. According to recent information members of our profession in Russia are now passing through a similar ordeal during the visitation of cholera, and details are given of a not very creditable medical exodus from the affected area. It is reassuring to learn, however, that this apparent dereliction of duty has not been entirely, if indeed it has been in any degree, spontaneous. Reports tell us of riotous disorder prevalent among the populace in Astrakhan and Saratoff, of a hospital wrecked, and of medical men and nurses shamefully maltreated. It is easy to conjecture a possible reason, which is no reason, for this extraordinary behavior. The intractable nature of established cholera is well known, and we may conclude that the ignorant mob have, in their impatience of the epidemic, attributed their misfortune to the supposed incapacity of those who are laboring for their relief. This error is everywhere too common, though not everywhere equally extreme or equally disastrous. Selfishness, ignorance, and ingratitude are its underlying causes. The Russian Government, it is said, has interfered to prevent the resulting exodus of practitioners, and there is therefore some ground for hope that under the control of a recognized authority we may shortly witness the signs of a clearer understanding of the position and of a more generous unity in the face of the common foe.—London Lancet.

Tubal Gestation and Oöphoritis.—Dr. Vertsinski, writing in a Russian journal on the differential diagnosis of tubal gestation and oöphoritis, calls attention to one very characteristic symptom, which had been described by Thomas as far back as 1873, had then fallen into oblivion, and was only, in 1889, again thoroughly appreciated by Prof. Lebedeff. This symptom is the varying size of the tumor in inflammatory conditions of the tubes and ovaries. The tumor is sometimes as large as an orange, while on other occasions, and often in a few days only, it is barely to be defined. This periodical variation in size is closely connected with menstruation and ovulation.—Ibid.

Marriages, Births, and Deaths in England and Wales.—The general abstract of marriages, births, and deaths, issued from the Registrar General’s office of England preliminary to the regular report of that office, gives the following figures for the year 1891: Estimated population at middle of the year 1891, for England and Wales, 29,081,047; persons married, 452,050; marriages, 226,025; births, 913,836; deaths, 587,666. The ratios, per 1,000 of the population, deduced from these figures are as follows: Marriage-rate, 15.5; birth-rate, 31.4; death-rate, 20.2. The marriage-rate was slightly higher; the birth-rate was less; and the death-rate was greater than than the average of the previous years.—Boston Medical and Surgical Journal.

Paper Money and Bacteria.—Drs. Acosta and Rossi, of Havana, have made a series of examinations of the paper money issued by the Bank of Spain, which is current in Cuba. Every one who has been in Havana will remember the filthy condition of the small denominations of bills, especially those representing but a few cents. Two of these notes contained more than 19,000 germs of various kinds. Cultures were made on different media and injected into the peritoneal cavity of rabbits and guinea-pigs, most of which died within twenty-four hours.

SPECIAL NOTICES.

Catarhal Affections.—An excellent cleansing and disinfecting solution for free use in the nasal cavities by means of the spray apparatus, douche, or syringe is prepared as follows:

R. Acidi borsalic... 3 i; Sodi borus... 3 i; Sodi chlorid... 3 ss; Listerine... 3 ii; Aqua pura... 3 vi. M.

"Coca" has maintained its reputation as a powerful nerve stimulant, being used with good results in nervous debility, opium, and alcohol habit, etc. The highly variable character of the commercial drug makes it uncertain, however. Robinson’s Wine Cocai (see this journal) we believe to be a uniformly active article, it being prepared from assayed leaves, the percentage of Cocaine being always determined by careful assay.
Original Articles.

ADVANCEMENT IN MATERIA MEDICA.*

BY W. W. RICHMOND, M. D.

John Ruskin, in one of his lectures on political economy, says that five great intellectual professions relating to daily necessities of life have existed in every civilized nation, viz., that of the soldier, the pastor, the lawyer, the merchant, and the physician. The soldier's profession is to defend; the pastor's, to teach; the lawyer's, to enforce justice; and the physician's, to keep in health. What implements of war are to the soldier, codes and statutes to the lawyer, theology to the minister, and capital to the merchant, materia medica is measurably to the physician.

As all professions attain their highest excellence in proportion to the manner in which they understand and utilize that which is adapted to their furtherance, so the physician, his other attainments in the science of medicine being equal, becomes what he should be when he is familiar with materia medica and its advancement. Hence arises the importance of the subject. There is a three-fold duty which compels every one who would succeed to keep himself familiar with the progress made in the science of medicine.

This duty relates to himself, his patient, and to the profession; and out of this duty, discharged in all its ramifications, is easy to be seen the progress resulting in breadth of thought and experience to the practitioner, in alleviation of pain to the patient, and general good to the profession. We note with pleasure, then, every useful agency that is being added to the already efficient armor of our science. While we remark the advancement of materia medica as matter of rejoicing, enabling, as it does, the physician to combat disease with a greater degree of success than in former times, it is well to remember that the advancement is due not only to the discovery and production of new remedies, but in part to the better knowledge of adaptation of many of the older remedies, which have been sheet-anchors in the profession for years, and which are important in merit and administration comparable to any of the present time.

Finding, as we do, perhaps no remedies of higher rank in their various medical properties and uses than veratrum, digitalis, chloral hydrate, opium, chloroform, iodine, and mercury, we are forced to admit that these, with many others of equal age, have helped in their turn to bring materia medica to its present standard. The progress which has attended this department of medicine has undoubtedly resulted in the production of much material that is useless, as well as much that is in a high degree beneficial. To note elaborately the recent advancement of materia medica, saying nothing of the progress made in the last quarter of a century, would be a task quite beyond the limit of my ability and unsuited to the design of this paper. I shall, therefore, do little more than indicate some of the many articles which have recently become of utility to the profession.

Among the most recent of these products, as well as perhaps the most valuable remedies for the reduction of the temperature, are the coal-tar preparations, antipyrine, antikamnia, acetanilid, and phenacetin. Much benefit is

*Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Society, May, 1892.
derived from the use of these, if not administered excessively.

It is believed, and with reason, that when these remedies were first introduced the administration of them was too lavish. It is gaining opinion that the best results are to be obtained by giving them in small doses, thus securing an appreciable reduction rather than a reduction that is very decided. The properties possessed by these remedies attach importance to their use in the tranquilization of the nervous system. The preparations, in virtue of the success which has attended their administration, are regarded as possessing value of a very decided character. They certainly demand the close attention of the profession, offering as they do grounds for great expectations.

Strophanthus and nitro-glycerine claim merit and offer inducement for consideration and ask to be recognized as heart tonics. Papoid, derived from papaya curica, is a digestive remedy, new and vegetable, and its importance an undisputed fact. Johnson and Johnson, of New York, in a pamphlet entitled "Papoid, its Formula and Methods of Use," have rendered a valuable service to the medical profession in putting in concise form the results of administration of papoid, so as to render accessible to the busy practitioner what otherwise would be difficult to obtain in the immediate demands of practice. This new remedy is considered of great utility in disorders of digestion, stomach catarrh, chronic dysentery, and flatulent diarrhea.

Among the foremost applications are its administrations in the displacement of the false membrane, which occurs in croup and diphtheria. In the use of papoid for diphtheria results are very satisfactory; the arrest of the disease, destruction of bacteria, displacement or detachment of the membrane so as not to reform, easy respiration, and, in a large majority of cases, complete cure, are specified as resulting from its use. In attestation of its merit in the treatment of other diseases the success which has been attained is triumphant.

In surgery, "cancerous growths," fissure of the tongue, and diseases of the ear, together with adhesions and false tissues, the success claimed for it is equally high. It certainly commands attention and justly deserves the prominence given it. Sulfonal is guaranteed, as a trustworthy hypnotic, a prominent position among the valuable remedies of recent date. Its claims to recognition are very strong. Reliability and freedom from effects which operate deleteriously upon the circulation are said to be among its leading qualities. This accepted, the claim that sulfonal satisfies a want long felt is as real as it is noteworthy.

Salol claims notice as a remedy for virtue and efficacy, and has been prescribed with benefit in rheumatism and gout. In the recent epidemic of la grippe it has been prescribed, combined with quinine and phenacetine or anti-kannah, with very excellent results. The value of antiseptics is worthy of careful consideration, occupying as they do a position of importance to surgery, to the alimentary canal, and to practical medicine in the treatment of infectious diseases.

The introduction of aristol as a substitute for iodoform has superiority very generally recognized. This new drug, it is claimed, and experience would, it seems, justify the claim, has properties which take the place of iodoform with none of its objectionable features.

When it is remembered that iodoform is a powerful therapeutic agent in almost every department of medicine, notably that of dermatology, that it has in combination stimulating and antiseptic qualities, possessing also valuable properties as a local anesthetic, the value of aristol replacing iodoform may be readily conceived, and the introduction of it a material advancement in materia medica.

Dr Eichhoff, physician to the Dermatological and Syphilitological Department of the city of Elberfeld, to whom acknowledgments are made for information on the subject, has used aristol in skin affections with most gratifying results.

In gynecological practice this new iodine compound, as a therapeutie agent, is possessed of merit which it is claimed will reward the further investigation of gynecologists. Being as good, if not better than iodoform, it has none of its toxic properties and disagreeable odor. In diseases of the nose, ear, and throat it has qualities which are claimed to be superior to boracic acid, iodoform, and iodol.
Dr. Langgard, on the mode of prescribing aristol, emphasizes that it should in no case be used in connection with starch, caustic alkalis, or carbonates, or such other substances that have affinity for iodine. The conclusion arrived at is that aristol should be used alone or in ethereal or oleaginous solution, or mixed with collodion, lanolin or vaseline.

There is yet another substitute for iodoform which claims respectable notice and position. I refer to the new iodiu compound, eufropen. As an antiseptic and anti-syphilitic it is said to possess qualities approximately incomparable. In an abstract from an article written by Dr. Eichhoff it is declared that eufropen has been of great healing power in various directions, being employed in many cases to Dr. Eichhoff's extremely great satisfaction.

Experiment upon ulcerative and inflammatory conditions of laryngeal, pharyngeal, and nasal diseases has been of excellent character.

Thus we have in aristol and eufropen two new antiseptics added in the past year to our already valuable list, yielding results so satisfactory as to call attention of both physician and surgeon.

Much advancement necessarily beyond a cursory review of materia medica might be profitably discussed, but in conclusion will only ask your attention to the importance of sulpho-carbolic acid in the treatment of typhoid fever, diarrhoea, and dysentery. The history of medical science, like that of literature and art, furnishes evidence that every improvement made, whether the intention be to improve or to supersede, finds its basal element and incentive to its existence in the age that has gone before.

While then we are welcoming with supreme delight every manifestation of progress, and adhering to every rule of recognized truth, let us not abandon ourselves to the whims of every new claimant, but rather strive for that equipoise between the new and the old which is essential to the successful administration of an advancing materia medica.

Let us hope that there may be enough conservatism in the profession to maintain, by a successful administration, every useful article which has been or may hereafter be introduced, and that every degree of progress may be a perceptible gravitation toward that great center wherein lies the realm of ultimate fact.

Clinton, Ky.

REPORT ON THE VITAL AND MORTUARY STATISTICS OF KENTUCKY FOR 1891.*

BY T. R. GREENLEY, M. D.

At our annual meeting last year I had the honor of being appointed a committee to report on the Vital and Mortuary Statistics of the State, and as I can only repeat what I said on that occasion, that we, unfortunately, had no statistics of our own pertaining to population, my report on the present occasion can only be of doubtful accuracy, as it is compiled from the United States census report of 1880, based on the ratio of increase made in the decade from 1870 to that of 1880. In order to get at the births and deaths of 1891, and the increase of population for the past eleven years, I take the number reported in 1880 and get the ratio of increase, as before remarked, as existing in the decade from 1870 to 1880. I should, however, have premised these remarks by stating that I expected to have been able to make this report from the United States census for 1890, but by inquiry of Dr. J. S. Billings, I learned the Kentucky statistics had not been published, and hoping they would be by the latter part of April I made a second inquiry, but they are still unpublished.

Thus it will be seen my only chance to make a report is, as before stated, by reference to the United States census of 1880.

According to the census of 1880 the population of Kentucky was 1,684,600. In the same year the mortality was 23,718, being 14 per 1,000 of the living population, or 1.40 per cent. The number of children born that year was 52,982 or 1 to 31.43 of the population. The ratio of births to deaths was 2.24 to 1. The ratio of males to females born in 1880 was as 1.19 to 1.17.

The increase of population from 1870 to 1880 was 363,600, equal to 27.5 per cent. The increase in births was 10,962 or 26 per cent; and in deaths 9,373 or 39.9 per cent. This would

* Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Society, May, 1892.
seem to be a large increase in mortality, but it will be recollected that 1870 was a very healthy year, the death-rate being only 10.86 per 1,000 population.

Now, if we make the same ratio of increase from 1880 to 1891 as the census shows for the decade of 1870 to 1880, the population will be for the last year 2,194,300, and the increase 510,000, or 30 per cent in eleven years. The increase of births for the year 1891 according to ratio of the decade from 1870 to 1880 would be 14,566, the whole number being 67,548, equal to 32.52 of the population or 27.55 per cent, and at the same ratio of mortality as in 1880 there would have died in 1891 the number of 30,800, being 14 per 1,000 or 1.40 per cent of the population. The ratio of deaths to births is as 1 to 2.

The census of 1880 shows that of all children who died under 5 years 60 per cent died under 1 year, and 55.5 per cent of all that died under 10 years. This is an alarming fact, and should call on medical men especially to give closer attention to the welfare of the little ones.

Of the 1,684,600 population in 1880, 329,000 were colored, but as the vital and mortuary statistics were not separated from the whites, we have no means by which to make a ratio of increase of their birth- and death-rate. Could this be done, no doubt the death-rate of the white population would be somewhat lowered.

The late United States census returns for Kentucky show a population only of 1,858,600, which doubtless is incorrect and far below the real number of the people of the State. This is very evident when we make a comparison of the increase from 1870 to 1880. The population in 1870 was 1,321,000, and in 1880 it was 1,684,600, the increase during the decade being 363,600. If we allow there was no greater increase during the decade from 1880 to 1890, this number added to 1,684,600 would make 2,047,000 for 1890, but we consider the probability of a greater increase from 1,684,600 in ten years than from 1,321,000, the population that afforded the increase of 363,600 in the decade from 1870 to 1880. There would, then, seem to be a deficit in the number of people, as enumerated by the census-takers of 1890, of over 200,000. Of this fact we can hardly be mistaken; for it is not reasonable to suppose that the census returns of 1850 included more people than the State contained; nor is it reasonable to presume that the same ratio of increase of population was not maintained during the decade from 1880 to 1890 as was from 1870 to 1880. There existed no cause in action during that period to have retarded the growth and increase of our population, but, on the other hand, it was one of the most prosperous periods in our history. There was a large immigration to the State, many towns and settlements made, manufactories established, and mining operations greatly increased.

The only statistics of our own for the last year I was able to obtain, were those of the mortality of Louisville, furnished by Dr. Galt, the able health officer of that city, which is as follows:

Total mortality, 3,087; male, 1,470; female, 1,517. Color: white, 2,258; black, 799. Nativity: United States, 2,376; foreign countries, 711. Under one year, 556—one to two years, 168—two to five years, 192—five to ten years, 139—ten to twenty years, 212—twenty to thirty years, 359—thirty to forty years, 285—forty to fifty years, 222—fifty to sixty years, 987—sixty to seventy years, 308—seventy to eighty years, 216—eighty to ninety years, 96—ninetieth to one hundred years, 13—over one hundred years, 6—not stated, 28.

Estimated population of the city, 200,000, making the death-rate 15.43. This is quite a low mortality when we consider the colored population is included in this estimate.

The United States census report for 1890 only made the population of the city 165,000, but it is known that many citizens were left out by the enumerators. The City Directory of that year, allowing the ordinary' calculation per name, made it about 190,000, and there is but little doubt that the population has increased 10,000 since its publication.

This is a very favorable showing for the sanitary condition of our metropolis, and on comparison with the death-rate of other large cities of the Union she will stand near the top of the column.

It would seem strange to an outsider to be informed that the city has no vital statistics. I
was speaking to Dr. Galt on the subject, when he remarked that he had been making some effort in that direction, and regretted that we were so far behind other cities in this particular. It is to be hoped we will soon see Louisville wake up, and a record of her births reported to the Health Department.

It will be recollected that at our last meeting a committee was appointed to present an outline of a proper law before the legislature, at its ensuing session, for the efficient collection of vital and mortuary statistics of the State. This committee was composed of Drs. J. N. McCormack, Beecher Todd, and myself. Before the close of the meeting I had a conversation with Dr. Todd, not finding Dr. McCormack, and he left the whole matter in the hands of Dr. McCormack and myself, saying whatever measures we agreed on he would sanction. As I had no opportunity to confer with Dr. McCormack, personally, I wrote to him last fall to get up such a plan as he thought most advisable for the consideration of our legislators, and I would sanction it, as he was more familiar with such matters than the other members of the committee. The doctor responded, that owing to a measure the State Board of Health was intending to bring before the legislature to prevent the adulteration of food and medicine, he deemed it unadvisable to attempt to get a law on statistics passed the present session, as too much at a time from the doctors might disgust the stomachs of our Solons. I answered him, claiming that it was essential to have mortuary statistics, or we would never know the dire effects of adulterated food and medicine.

This virtually left me alone on the committee, and as I had been at work on this matter for several years, I disliked to postpone it any longer; and as I had seen nothing of the other measure before the House, I was determined, if possible, to have the bill before that body this session. So, a few weeks ago, I wrote out what I deemed to be an efficient statute respecting the matter, and put it into the hands of our county representative, who promised to have it before the House the past week.

I based the provisions of the proposed statute on the law of Indiana pertaining to this matter, but varying in some particulars. It makes it obligatory upon all practitioners of medicine and midwives to keep a record of all cases of births and deaths, and make returns of same at the end of the year to the Secretary of the State Board of Health. It also enjoins all clergymen and others who perform marriage ceremonies to make annual returns of all marriages to said secretary. All said parties are to have blanks furnished them by the secretary. In order to prevent physicians and others thinking they were working for nothing, the statute allows them ten cents for each case reported, or five dollars annually. I presume, however, that many physicians who are given to do so much gratuitous work would ignore pay for this. The statute also allows our friend, the honorable secretary, an honorarium of five hundred dollars annually for tabulating and compiling the statistics in proper form for publication.

In order to give the matter more impetus, a fine of $5 to $10 will be assessed for neglect of duty in making proper returns. So it will be seen that there is a slight inducement ahead, and an impetus behind, to remind one of his duty.

Cases of infectious or contagious diseases must be reported to the Secretary of the State Board of Health immediately on making their appearance.

For the honor and credit of the State I hope this measure will become a law, and that every member of the profession will take pride in complying with its provisions.

Kentuckians are a proud people, and like to have it known among strangers that their State products are equal, if not superior, to other States. They can boast of their fast horses, good whisky, beautiful women, and that they produce half of the tobacco raised in the United States, and ninety per cent of the hemp. They can also boast of the State's renown in great statesmen, jurists, and orators, perhaps equaling if not excelling any other State.

The medical men are also proud of the fame the medical profession of the State has enjoyed for many years; perhaps equal or greater than most any other State. Let us hope, then, as we stand so high in every other particular, we will not be content until we can have an effect-
ive law by which we can know something of the status of our population as it respects the birth- and death-rate, and their sanitary condition, so that we will not be ashamed of our ignorance and lack of interest in the growth and hygiene of our people. Let a sense of duty and patriotism, to say nothing of professional pride, impel us to wake up in this matter and take a stand equal to that of the foremost of our sister States.

"Our hearts are with our native land;
Our song is for her glory."

"Let fowk bode well and strive to do their best,
Nae minir 's required."

ORELL, KY.

**SUPRA-PUBIC CYSTOTOMY FOR CHRONIC CYSTITIS AND CYSTIC HEMORRHAGE: A REPORT.**

BY JAMES B. KINNAIRD, M. D.

No class of diseases so baffle the patience and skill of the physician as those inveterate and incurable cases of prostatic enlargement. Many complications originate in consequence of this affection, and numerous expedients have been devised to alleviate the dangers and remove the difficulties.

An eminent surgeon is responsible for the advice "that no operation should be thought of so long as a catheter can be passed through the urethra." This advice should not be closely followed. Probably the majority of the members present have seen cases in the aged where the catheter could be introduced and the urine withdrawn, but the accompanying cystic and prostatic inflammation could not be relieved.

Mercier's operation of punching out the median lobe, or punching a hole through the prostate with a dangerous gouge, Battini's, of enlarging the orifice by electrolysis, and Newman's, of puncturing the prostate by electricity, often fail to relieve and frequently aggravate the existing disease.

Supra-pubic section for prostatectomy and cystitis has always seemed feasible to me, and long before I had learned much about the technique of the operation, and before Peterson's bag for inflating the rectum was known to the profession, I advised supra-pubic cystotomy for chronic enlargement of the prostate with chronic cystitis.

The case herewith reported was a very unpromising one for operation, which was done as a last resort:

Judge E. will be sixty-three years old in August, having been born August 25, 1829. My records show that my first visit to see him was on December 14, 1886, when I was called to relieve retention of urine from enlarged prostate and stricture of urethra. There were two strictures, one at depth of four inches, and one an inch from meatus urinarius. He was suffering from urinary fever. The smallest size catheter was introduced with difficulty. While using catheter I discovered he had an adherent prepuce and I advised operation for both. With use of diuretics and diaphoretics he was soon out again, but declined surgical relief.

Another attack of retention and urinary fever February 3, 1887, and my records show that he was visited from time to time until July, 1887. Again I urged him to submit to an operation, and advised him to quit the use of intoxicants, which he used freely and regularly, and again he declined.

After repeated warnings he came to my office and requested me to circumcise him, which I did under cocaine anesthesia May 11, 1888. He had retention May 18, 1888, that could not be relieved by ordinary means, and while suffering consented to an operation. A small filiform guide was introduced after two hours' trial, and having been etherized by Dr. Bush, I did an internal urethrotomy with a Maissoneuve urethrotome, which was finished with an Otis dilating urethrotome. His bladder was washed regularly until all inflammation had subsided, and May 31st he began visiting my office to have sound introduced, which was done, with a No. 18 American, regularly for two years. The sound was passed weekly for a time, then every two weeks, then monthly.

I was not consulted again until January, 1892, when he called at my office complaining of agonizing bearing-down pain in head of penis, with frequent desire to urinate. The
stream was contracted, and no relief followed micturition. The stream grew smaller, but he had no retention. This state of affairs continued to increase in intensity, baffling all treatment, local and general, until about the middle of March, when he began to notice clots of blood in his urine. Frequent washing of the bladder with four-per-cent solution of boracic acid was practiced, but the clots increased in quantity, finally resulting in cystic hemorrhage. The first hemorrhage was alarming, continuing several days. Small clots were seen afterward from time to time; the pain in the perineum increased in severity until he was unable to sleep well by day or night. Every few minutes he would attempt to urinate, when small hemorrhage would follow. Treatment accomplished nothing, rest was impossible, and as he grew weaker rapidly I determined to operate. He was now anxious for relief. No opiates were given during his illness.

Internal urethrotomy was contra-indicated; external urethrotomy would have been impracticable; perineal section could not have been done successfully on account of enlarged prostate; Mercier's operation would have been hazardous. There was hemorrhage, stricture of urethra, enlarged prostate and chronic cystitis. With such symptoms to combat I believed the high operation was imperative.

On May 14, 1892, assisted by Drs. H. C. Herring, T. J. Hood, and H. M. Grant, I performed supra-pubic cystotomy, all details being carried out under strict aseptic and antiseptic precautions. Having shaved the pubes and cleansed the surrounding parts with ether and soap, four ounces of solution of boracic acid, ten grains to ounce, was introduced through a No. 9 linen Couéder catheter by means of a Pomeroy ear syringe. The penis was then tied with a piece of rubber tubing to prevent the escape of the fluid. The bowels had been previously moved by a cathartic. Petersen's rubber bag was now introduced into the rectum, and sixteen ounces of warm water injected by means of a Davidson syringe. The bladder could be readily located above the pubes by palpation and percussion. Having placed him on a table with hips elevated, an incision was made above the pubic bone three and one half inches in length and carried down between the recti and pyramidales muscles in the median line. The deep fascia was cut upon a grooved director, and the prevesical fat pushed up out of the field of operation. The peritoneum was not encountered.

As soon as the anterior wall of the bladder came into view two loops of strong silk were passed through the walls of the bladder, one on each side of a median line, and while an assistant drew the organ up by means of these fillets a bistoury was passed, making an incision an inch or more in length. Profuse hemorrhage followed the incision through the walls of the bladder; there was a gush of the fluid from the bladder, mingled with a mass of decomposing blood-clots and pus, and when the organ collapsed hemorrhage ceased. The interior was now explored and the organ was found greatly contracted, so that it would not hold more than one fourth of a normal bladder. The walls were thickened and there was an intense cystitis with hemorrhage. The prostate seemed to fill up nearly half the bladder. There was no stone, although symptoms of stone had been noted.

The bladder was now flushed with a 1-3,000 corrosive sublimate solution, a large fenestrated rubber tube or catheter (No. 17 English—19 American) was introduced, the walls of the bladder stitched to the wound, superficial stitches were made, and the patient put to bed. A rubber tube, carried into a vessel beneath the bed, was attached.

The shock was severe, and I feared my patient would die, but in twelve hours reaction had taken place; his urine was of dark amber color instead of blood; specific gravity, 1022; no albumen, and urine normal in quantity. The temperature has never risen higher than 101°, which occurred on the third day after the operation. The average temperature for first ten days was 99°, and has been normal ever since. His pulse has never exceeded 105, except the first day, when three hours after the operation it was 140, respiration 76, and I supposed he was dying. He gradually improved, and at the present time sits up a great deal and walks about his room. During the greater
part of his illness previous to and succeeding the operation there was some mental aberration. Now his mind is clear, he is gaining in strength, and had he not hemiplegia would be able to perform manual labor in a few months.

Previous to his illness he was pale, anemic, emaciated, with left hemiplegia, resulting from sunstroke while in the service of the United States, which had incapacitated him from the performance of labor for many years. He has been drawing a pension for total disability for many years. His weight was about ninety-five pounds, with no appetite. If I had searched the county over for a bad subject for operation I could not have selected a worse.

The opening has not been permitted to close, and will be kept open for convenience and safety, although he passes some urine per urethram. He now keeps the tube in by means of a silver shield I had made for him. This shield consists of a silver plate, one and a half by two and a half inches, with an opening in the center which is made small enough to constrict the tube, thus preventing it from slipping. Straps pass through each end and around the hips to keep it in position. An ordinary male rubber urinal is attached so that he may walk at pleasure.

The tube is taken out daily and washed. The bladder is frequently washed with warm water, sometimes boracic acid in solution, sometimes sodium chloride in solution.

Some operators recommend the drainage of bladder by means of two parallel tubes. I can see no necessity for two, as one will answer all purposes. I do not fear infiltration as some do. It did not occur in this case, and will not take place if the operation is done with care and proper nursing is followed.

I would recommend this operation for cystitis in those cases that resist all treatment, as they frequently do.

Although my prognosis was unfavorable, and the operation was done as a last resort, the result has been most satisfactory, for he was rescued from certain death, and immediate relief was given.

Success in this case, which seemed so hopeless, has strengthened the operation in my estimation, and I would prefer it to perineal sec-

tion in the majority of cases where surgical interference is required for stone. I am not so sanguine as some have been in the past who believed it was the best operation for stones of any size. I do believe it is the best operation for large stones, for cystitis, where the prostate is enlarged, and for cystic hemorrhage. I would recommend it to the members of this Society as the best procedure in those aggravating and everlasting cases of chronic cystitis, which we see so frequently, that test our patience and exhaust our resources.

To Dr. Hunter McGuire, of Virginia, belongs the credit of priority in performing supra-pubic cystotomy for chronic prostatic obstruction. In 1888 Dr. McGuire read a paper before the American Surgical Association upon "Formation of an Artificial Urethra in Chronic Prostatic Obstruction," and a later report upon "Twenty-one Cases of Supra-pubic Cystotomy, with remarks," published in the eighth volume of Transactions. In the discussion that followed the reading of Dr. McGuire's paper in 1888 the advantages of the operation were not admitted by all. Hayes Agnew took the position that a skilled operator may do the operation with perfect safety, but that an inexperienced one might unexpectedly find himself doing an intra-peritoneal operation. McGuire, in reply, said that in his numerous operations he had never met with the peritoneum.

This report is submitted with the earnest hope that some of you may be induced to perform this operation in similar cases, and that your efforts may be crowned with success.

LANCASTER, KY.

Salol in Cholera.—The treatment for cholera proposed by Dr. Lœwenthal (a dose of two grams followed by hourly or half-hourly doses of one half to one gram of salol), after experimenting with it in the laboratory and on animals, has been used on human beings with remarkable results. Dr. Gonzales, of Salvador, has used this treatment in fifty-three cases of cholera in one of the Phillipine Islands with only three deaths (and these were already in the last stages of the disease when they came to treatment). The mortality under other modes of treatment is about forty-five per cent.
Societies.

LOUISVILLE SURGICAL SOCIETY.*
Stated Meeting July 11, 1892, Dr. A. M. Cartledge, Vice-President, in the chair.

Dr. W. C. Dugan: I have two cases of resection to exhibit. This patient was brought into the City Hospital a few months ago with acute inflammation of the elbow-joint. He was admitted to the medical ward, and had been treated by the physician in charge, who thought the trouble to be rheumatism. The arm continued to increase in size. Patient had considerable fever and great pain in the arm, and was referred to me for operation. I decided after a thorough examination to do a resection, making a long, straight incision over the posterior part of the elbow. This was done, and we found a large amount of tubercular matter and the bone very extensively diseased. I then resected the lower end of the humerus, leaving just the epicondyle eminences in order to preserve the muscular attachment, making a convex section of bone, and then cut through the olecranon process and removed it on a level with the cornoid process, scraping all the synovial membrane out. The wound was filled with iodoform gauze and arm put up in extension. The arm was enormously swollen; the dressing was changed every three or five days, and the splint removed in one week and the arm put in a sling. He now has practically no pain or soreness about the joint, has good movement, and he is in good condition and is going to have a good arm. The operation was done on the 1st of March, and he has improved all the time.

I desire to call special attention to the absence of lateral motion which is usually found after these operations, which I account for by the saving of the epitrochlea and epicondyle eminences to which are attached in part the lateral ligaments of the joint.

The next case is one that I have already reported, but have never shown him, hence my excuse for again referring to the case. This young man, twenty-two years of age, was in the City Hospital a year ago, suffering with tubercular arthritis of the right knee. I decided to resect the knee-joint, and at the time of the operation was undecided whether we would do a resection or just an arthrectomy, so we made a transverse incision, sawing through the patella, turning it back to find out if the condition of the bones was such as to call for the removal of the articulation or the scraping out of the diseased structure. But both the femur and tibia were extensively diseased, so they were sawn off and the synovial membrane all carefully dissected out. The operation was done and the leg put up in fixed dressing, which was left on for three or four months. The dressing was then removed, and the patient got along well, and, as you see here, he has as good stiff leg as one could expect to secure.

An interesting feature in the case was this: A few months afterward acute tubercular arthritis developed in the other knee; considerable fever, night-sweats, etc.; and the question was then, what were we to do with it? I at once decided to open it, thoroughly washing out with bichloride solution and inject iodoformized oil and tamponing with gauze, and the result is here to-night to show for itself. The joint was thoroughly opened in the presence of the class, on both sides, and the tubercular material scraped out with my finger and Volkmann scoop, and the joint cavity treated as above indicated. It was then tamponed with iodoform gauze, which was left in for about a week. At the expiration of this time the dressing was taken off, the gauze removed, and the joint again filled with iodoformized oil, and left, I think, for three or four weeks. When removed the next time I found that the wound had healed entirely, and from that time the patient had no more trouble. To-day, but for the presence of the incision, no one would suspect the joint was ever opened. I would have resected the other knee had it not been for the fact that he already had one stiff knee. I am confident that if the first knee had been treated as the last one the result would have been equally as good, for the symptoms were about the same.

I have treated a number of cases of tubercular arthritis and osteitis with iodoformized oil, and am very much pleased with it.

Dr. A. M. Vance: There is very little to be said about these two cases, except to compli-
ment the operator. I congratulate Dr. Dugan upon the successful result, and would like to ask if there was any complication or specific trouble in the last case exhibited.

Dr. W. O. Roberts: The first case exhibited by Dr. Dugan reminds me of one that I operated upon some time since. The patient was an engineer on the railroad. The operation was performed in about the manner described by Dr. Dugan, and the results were very gratifying; he is now able to run his engine.

The case of resection of the knee-joint is of considerable interest, and the operation seems to have been a very successful one. I also operated on a case of this kind some time ago, where it was found necessary to remove not only the cartilages but a considerable portion of bone, and I was very much afraid the leg would not grow any more; however, it did, and there was very little shortening. The result of the other knee operated upon by Dr. Dugan I think is marvelous, perfect as it could possibly be, and he is to be congratulated upon the outcome.

Dr. W. L. Rodman: These cases are certainly very interesting ones, and I have never seen better results from resection of the elbow-joint. I had a knee case that I expected to exhibit here to-night, but the man was a little sick and could not come. More than a year ago a tinner was working on the roof of a house and fell, and ran a rusty nail into the capsule of his knee-joint. I saw the man in consultation a few days after the injury. Found he had a well-marked synovitis of the knee-joint. I decided that something must have gone into the joint, as I believed suppuration to have taken place, and the only thing to do was to make an exploration. I found nearly a quart of pus in the capsule of the knee-joint in addition a nail without head. I made a free incision on each side, introduced two large rubber drainage tubes, through which the joint was irrigated twice daily for at least two weeks. The man has gotten along nicely and has as good a knee-joint as he ever had.

Dr. A. M. Cartledge: I think the left knee-joint case is one of intense interest, as it puts side by side here in contrast two operations; one the resection, the other the injection of iodoformized oil. I do not think we should attribute the great benefit to injection of iodoformized oil; I believe that in many of these cases of tubercular joint trouble a simple free incision of the joint, with thorough scraping out of the tubercular matter, or without scraping if free drainage is established, will be followed by the same result as when iodoformized oil is injected. I do not want to be understood as speaking against the use of this agent, but I believe the same results could be obtained by simply tapping the joint. I have read the very interesting and successful results reported by Senn, who used the injection in cases of this character.

Dr. Dugan: I prefer the iodoformized oil, and after reading Senn's reports on this subject I am thoroughly convinced that iodoformized oil has some special effect in these tubercular cases. I believe that the surgical literature on joint troubles should be rewritten. I think many cases of acute inflammation of the joints could be hurried to a favorable termination by opening the joint early. Dr. Vance was leaving the city, and left in my charge a professional base-ball player with an acute suppurative arthritis. We thought that by frequent aspirations we could get along without arthroscopy, but after Dr. Vance left the symptoms became more severe, and so the joint was freely opened, washed out, and treated as above suggested. The patient made an uninterrupted recovery, and to-day has as good a knee as anybody, and is playing behind the bat as successfully as before the accident.

Dr. Roberts: Here is a patient that was before this Society some time ago. He had his leg broken in a railroad accident on March 21, 1891. It was a transverse fracture, and, as I reported it, was dressed in plaster, which was removed at the end of twelve weeks, and there was nothing but a fibrous union with comparatively little shortening, probably about one half an inch. I then decided, for the purpose of creating an irritation, we would let the man walk about and see if we could not get a bony union. This he did for some time, but no union resulted. I then used a Smith's splint with no more favorable result. In October, assisted by Dr. Vance, we put the man under
the influence of chloroform and rubbed the ends of the bones together. Smith's splint was again applied and the man allowed to walk. But soon afterward he felt that the bones were slipping and the leg was growing shorter and shorter, until finally there was a shortening of two inches; still he was able to walk with the aid of a cane. On the 8th of March, 1892, a little less than a year after the original injury, we cut down on the fracture, Drs. Vance, Du- gan, Heuser, and Pearce assisting in the operation. We found the bones widely separated; there was no sign of a union whatever. The ends of the bones were sawed off in such manner that we could in a slanting way draw them together. The ends of the fracture were then fastened together with a large bunch of silk-worm gut, and the leg put up in plaster dressing. The man got along without any trouble for a week; at the end of that time there were evidences of suppuration. We removed the dressing, and, as anticipated, found some little suppuration had taken place. We washed it out thoroughly with peroxide of hydrogen, and put the leg up again in plaster. There is now perfect union of the fracture, but there is still a small fistulous opening.

Dr. Cartledge: What was your idea in using silk-worm gut for fastening the ends of the bone together?

Dr. Roberts: There were two reasons: We thought we could better sterilize it than any other material, and then the silk-worm gut is less liable to break than the silver wire. If you use wire for suturing bone, and draw it sufficiently tight to firmly hold the fragments together, it is very liable to break.

Dr. Turner Anderson: I remember, at the time you exhibited this patient before the Surgical Society, you stated that a successful result was very rarely obtained. The question was whether it would be desirable to attempt the operation in this case, or let the man limp along in the state as presented. Now, is this result liable to be permanent?

Dr. Roberts: I think the result will be permanent. There have been a number of cases of the kind operated upon in this city, and, excepting one, this is the only case I know of where perfect union has taken place.

Dr. D. W. Yandell: The same thing occurred to me as mentioned by Dr. Anderson, that is, how many of these operations are really successes. However, in this case, after going four months it looks as if it ought to be permanent.

Dr. Vance: I saw this patient several times with Dr. Roberts, and assisted him in the operation, the result of which you see to-night. I believe in this case the result is going to be permanent. It is the first one I have ever seen where union took place after the operation. There is one point in the case that has not been mentioned: the shortening or slipping by of the bones was so great that it required all the strength of two men, after we sawed off the ends, to stretch the tissues to get the ends of the bone into apposition. I believe they would have remained so without any suture, and the perfect coaptation possibly explains the good union and result. I am glad to see the good result from the use of the silk-worm gut, and think this case demonstrates it to be the best suture material for bone. I do not believe in silver wire at all; it always leaves a sinus, has to be cut out, and always breaks once or twice as a rule before you have drawn it sufficiently tight to do any good.

Dr. Rodman: This is certainly a most interesting case, and the only case of ununited fracture I have ever seen where the result was so gratifying. I have never cut down upon the fragments of an ununited fracture myself, but have assisted in four or five operations, and this is the only one in which union has taken place. In the other cases there was no suppuration, and in this case there was free suppuration, which may have something to do with explaining the good result. A distinguished English surgeon, while in this city last fall, operated on a case of non-union fracture of the ulna. The operation was done under strict antiseptic precautions, and there was no suppuration after the operation. The result at the end of eight weeks seemed to have been all that could have been desired; there was an abundance of callus, which seemed to be very firm. At the expiration of ten weeks there seemed to be a little motion at the seat of the fracture and less callus than there had been previously. At the end of eleven or twelve weeks motion was
again quite distinct, there was less callus, and apparently no bony union whatever. The case is no better off than before the operation.

I do not agree with Dr. Vance in what he says concerning silver wire always causing suppuration. This case I have just mentioned proves that it does not cause suppuration. A large amount of silver wire was used and none of it was seen afterward. It never caused any suppuration at all, and it is in his arm now. Certainly silver wire is just as antiseptic as any thing that can be used in these cases.

Dr. Vance: I would like to ask Dr. Rodman how many times he has seen good results from the use of silver wire in the character of cases referred to.

Dr. Rodman: I only recollect one other case, but the fact is well established that silver wire is the least irritating of all suture materials.

Dr. Dugan: I agree with Dr. Vance in regard to silk-worm gut; I think it is better than any other suture material, for the reason that you can apply it and there is no breakage at all. I want to disagree with him, however, as to the disappearing of wire. I saw a case the other day that I operated upon a number of years ago for fracture of the patella, using silver wire suture, and the wire is still in. Of course I recognize that we sometimes do have suppuration following the application of it. This is simply another case like that referred to by Dr. Rodman where the wire has remained in a number of years and has given no trouble.

Dr. Cartledge: I have had very little experience in suturing ununited fractures. In suturing the patella I have used the over-prepared gut. In the case I exhibited to this Society some time ago, who was operated upon for fracture of the patella, gut was used for suture, and the patient is able to walk as well as he ever could. I still believe that the over-prepared gut is the best suture material.

In regard to the production of callus, I question if suppuration adds any thing to the production of true callus. I think if we do a perfect operation, and by artificial means protect the formation of callus, there is very little reason for irritation. Certainly I can not see how a supplicative process adds any thing to or induces the formation of callus. In a simple fracture the formation of callus is greater than in a compound fracture which suppurates. Now I believe that in the fracture of bone surfaces, if we can maintain perfect apposition for twenty-five days, the uniting process will be so far advanced, if it is going to unite at all, that it needs no assistance from artificial means between the fractured ends, hence the futility of agents which remain after that period.

In this connection I would like to make a continued report of a case mentioned at a previous meeting of this Society. I refer to the man having a compound fracture of the forearm. Both the radius and ulna were broken and a fragment of one and one quarter or one and one half inches in length was broken entirely out of the ulna; there was also perforation of the radial artery. The broken fragment was removed and thorough drainage established. In twelve weeks there was firm union of the ulna, but the radius has never united. The arm at the time of operation was put up in plaster dressing and every thing was kept perfectly aseptic. I propose in a few days to make an incision over the radius and to unite the ends of the bone by a ligature.

Dr. Roberts: I have very little to add, except that I agree with Dr. Vance, that it is probable if no suture had been used the union would have been just as good, as I believe the fragments would have remained in apposition. Treeves, in his work on Operative Surgery, which has only been out a short time, advises that no material be used to fasten the ends of the bone together. He says all that is necessary is simply to saw off the ends of the bone and put on a plaster dressing which will hold them in apposition. This is what I believe.

Dr. Yandell: Do you think the surgeon as a rule sutures the bones for the purpose of keeping up irritation?

Dr. Cartledge: Partly, but it is more to obtain a perfect apposition.

Dr. Yandell: Then why do you remark at the end of twenty-five days there is no need for further apposition?

Dr. Cartledge: If we can maintain perfect apposition for that length of time, I believe union will have taken place, provided it takes place at all.
Dr. Yandell: Do you mean to say that cat-gut is the best suture?

Dr. Cartledge: That is my opinion.

Dr. Yandell: There are so many different kinds of suture material that the world will never agree as to which is the best.

Dr. Anderson: I beg to exhibit a placenta from a case of previa; patient thirty-four years of age, in her third pregnancy. The membranes are intact, except at point ruptured in treatment. One sixth of the mass was inserted over the os (previa partialis). First hemorrhage occurred at seven months, was controlled by rest. Feeble pains and severe flooding came on one month later, which was temporarily controlled by efficiently applied tampon. I saw the case in consultation a few hours afterward. Upon removing tampon the os was found dilated to about the size of a silver dollar. The pains were feeble and infrequent. The vagina soon filled with blood and very active hemorrhage recurred. It was deemed unwise to further rely upon tampon, and the patient being given chloroform the attached portion of placenta was freely separated and membranes ruptured. The breach was found presenting, and a foot was brought into the vagina, thus effectually plugging the os with half breach. Hemorrhage at once ceased and case terminated in birth of still child.

Concerning the treatment of this condition, I think the obstetric maxim, "that a contracting womb when emptied of its waters can not bleed to a dangerous extent," a most precious truth, both in accidental and unavoidable hemorrhage. I would advise the induction of labor in previa in all cases as soon as the condition is diagnosed; control bleeding with tampon until pains occur, and then rupture membranes, detaching the placenta from the os as far around as possible. Usually this is enough, help with forceps or version if indicated, but remember the maxim above quoted, and do not be too hasty.

Dr. Dugan: Did I understand you to say that the pregnancy was eight months advanced in this case, and you simply sacrificed the life of the child in order to save the mother? Do you not think it advisable in these cases to endeavor to save the child's life by cesarean section, since it is clearly demonstrated that the operation as regards the mother is not very much more dangerous than an ordinary laparotomy, and at the same time the child, if the operation is done early, will be saved?

Dr. Anderson: Owing to the condition of the patient at the time I did not think we were justified in attempting cesarean section. The life of the child was not considered.

Dr. Roberts: I have only seen one case of placenta previa, and in that case the woman came near bleeding to death. It was a vertex presentation, and I did as Dr. Anderson has suggested—that is, tamponed the vagina until uterine action came on, then ruptured the membranes and accomplished delivery. In this case both the mother and child lived.

Dr. Dugan: The question I asked Dr. Anderson is one that has been brought up a number of times in cases of advanced pregnancy, after the child has arrived at the age of viability, whether or not it would be best to perform cesarian section after applying the tampon. This operation has been very successful in a great number of cases of pelvic obstruction, both mother and child being saved, and the mortality according to the reports of American and foreign operators is so low that the operation is one of the recognized surgical procedures.

Dr. H. H. Grant: I have seen three cases of placenta previa, only one of which I saw before the membranes had been ruptured. In one of these cases Dr. Anderson reached the patient almost as early as I did, and in a very few minutes, with his assistance, delivery was accomplished, saving both the baby and mother.

In another instance I saw the patient after tampon had been applied by another physician very effectually, but the patient was perhaps thoroughly exsanguinated and labor was very feeble. She was delivered during the night, baby dead. The patient did very well for a few days, but on the sixth day developed septic fever and died.

In the other case, which I saw before the membranes had been ruptured, the os was very small; tampon was applied and kept in the vagina for twelve hours, then removed, but the os was not dilated, and it was again applied and removed at the end of twenty-four hours.
when the os was sufficiently dilated to allow introduction of the hand. This was carefully done and delivery rapidly accomplished. In this instance the mother recovered without any difficulty, but it was evident that the child had been dead for at least twenty-four hours. I think we should rely upon the tampon to control hemorrhage in these cases, changing it every twelve hours until uterine action is established and the os becomes sufficiently dilated to deliver the patient.

Concerning the point raised by Dr. Dugan with reference to performing cesarean section, this is answered by the fact that only with the most favorable surroundings is this operation justifiable, and it is the exception rather than the rule that we encounter these favorable conditions in the homes of our patients. If the patients could be placed in a hospital especially equipped for the purpose, then I should favor cesarean section, but, under the conditions in which we usually find them, I should be decidedly against attempting it.

Dr. J. G. Cecil: Dr. Anderson in his résumé of the modern treatment of placenta previa has left us nothing to discuss. I certainly can find no point upon which I would in any way disagree with him. My experience in placenta previa is limited, but I have found the methods detailed so clearly by Dr. Anderson to be those which are the most successful in the cases I have had to deal with.

I do not agree with Dr. Dugan as to the advisability of cesarean section in these cases. I think it is an operation which can hardly become universal; in the nature of things it can not, because these emergencies which arise in the practice of the general profession—that is, the general practitioner—so often are out of the reach of men who are capable of doing a cesarean section. Therefore it is hardly necessary to consider it outside of the centers of medical teaching. Then, again, those conditions under which cesarean section would be justifiable or advisable at all are the very conditions which with the improved idea of managing these cases, I think, makes it rather against the use of the knife. In other words, I think cases may be managed in the manner laid down by Dr. Anderson with better hope of saving both the mother and child than with cesarean section under any circumstances, at least it seems so to me. I take it, if you please, to operate upon a woman before she has lost much blood, before the rupture of the bag of waters, then the chances of cesarean section would be the thing, comparatively speaking; but these are the very conditions which favor proper conservative management of these cases without the cesarean operation. For that reason it seems to me that the question of cesarean section in this class of cases will hardly gain much if any hold, especially among general practitioners.

Dr. Cartledge: Cesarean section in cases of placenta previa is a question that is exciting a great deal of attention, and I would like to hear it discussed at greater length.

Dr. Roberts: The specimen which I exhibit is an ovarian tumor removed from a lady from a section of an adjoining State where very large tumors seem to develop, as this is the third one I have removed from patients in the same locality.

This patient was a lady sixty years of age; she first noticed the tumor about two years ago, because of the fact that it troubled her in stooping; she felt crowded about the abdomen. It is one of the largest tumors that I have ever seen; it felt through the abdominal walls as though there was a great deal of solid material, especially on the right side. The patient was put on the table to be operated upon, and we detected in the lower part of the abdomen just above the pubes a rather diffuse lipoma. A large incision was made extending about an inch above the umbilicus. The first cyst we encountered was punctured, containing about two and one half gallons, and after emptying it we were enabled to partially deliver the tumor through the abdominal incision; then it became necessary to open another cyst, and I believe before the tumor was entirely delivered there were three cysts opened. There were no adhesions whatever of the tumor to the wall or to the intestines, but there was an adhesion of the intestine to the pedicle. After removal of the tumor there was no vessel to be ligated at all after ligation of the pedicle, but for fear the adhesion of the intestine to the pedicle might
give rise to some trouble I detached it. The cavity was thoroughly washed out and a drainage-tube introduced. The tube was just long enough to reach to the bottom of the pelvis, and it is one of the longest I have ever used. I exhibit the tube here in order that you may see its length. The operation was done last Saturday morning at ten o'clock, and Saturday night at eleven o'clock I was summoned hurriedly to the patient, the message being that she was bleeding profusely. When I reached there I found her general condition good, pulse unchanged, temperature 99°. There was no evidence of loss of blood, but the bedding was considerably stained, and the pus-basin which had been placed between the patient's legs contained about four ounces of very red fluid. The drainage-tube after the operation had been emptied every hour, and there would be at each aspiration of the tube one to three drams of red fluid. This profuse flow came on after or during a severe retching spell. I felt satisfied from the general condition of the patient that there had been no considerable hemorrhage, and that most likely this fluid was either some water which had not been emptied from the cavity, or the immense pressure having been removed from the walls of the abdomen, some of the adhesions had possibly given way and were oozing. Nothing was done except to remove the soaked dressings, and then to have the tube aspirated every hour. This (Monday) morning there was hardly a dram of fluid that came out of the aspirator, and the tube was removed. The patient has gotten along without any elevation of temperature (over 99°), without any acceleration of pulse, and no pain.

Dr. Vance: I would like to ask Dr. Roberts if the hemorrhage did not come from separated adhesions rather than from a new bleeding point. I do not think it is uncommon for points where adhesions have been separated to bleed moderately.

Dr. Roberts: I do not believe that the hemorrhage could have been due to the separation of adhesions, because there was only one small adhesion. There was no evidence of loss of blood, and the hemorrhage might have been stained water left in the cavity from the operation, and the strain from retching brought the water out. Or possibly the sudden removal of so much pressure upon the abdominal vessels caused the capillaries to dilate, and some of the weaker ones may have given way; hence this accumulation of fluid, which, however, was slight.

JAMES S. CHENOWETH,
Secretary.

Abstracts and Selections.

Berlin Cholera Regulations.—The Ministry of Ecclesiastical, Educational, and Medical Affairs in Prussia has published the following set of instructions as to the course to be followed in case of an epidemic of cholera: (1) The virus of cholera exists in the evacuations of the patients, and can be transferred with them to other persons, and can also be transported in articles of the most varied character. Such things are, for instance, linen, clothes, articles of food, water, milk, and other drinks; and if even the slightest traces of the evacuations, not perceptible to the natural senses, exist on or in them the pestilence can spread. (2) The contagion may easily be carried, therefore, from place to place by persons who are or have been ill of cholera, or have come into contact with such, and who leave their places of residence in order, as they think, to escape the danger that threatens them there. This is all the more to be warned against as, on the one hand, one may be already infected before departure, and, on the other hand, one can protect one's self better at home than when traveling, by taking the following precautions: (3) People from places where cholera exists should not be received into houses. As soon as cases of cholera have occurred in a place, persons coming from it must be regarded as possible bearers of the germ of the disease. (4) Lead as regular a life as possible. Experience teaches that all disturbances of digestion make one specially susceptible to cholera. Be on guard, therefore, against whatever can produce such disturbances, such as excessive eating and drinking and the use of indigestible foods. Avoid especially whatever causes diarrhea or irritates the stomach. In case of diarrhea consult a doctor at once. (5) Eat and drink nothing coming from a house where cholera is present. Things by which the disease can easily be transmitted—for instance, fruit, vegetables, milk, butter, fresh cheese—must be avoided or taken only after being boiled. Especially the drinking of unboiled milk is to be avoided. (6) All water which may be polluted by excrement, urine, kitchen refuse, or other dirt, must be most rigorously.
THE AMERICAN PRACTITIONER AND NEWS.

avoided. Water taken from the ground under inhabited places, or from swamps, ponds, drains, or rivers is suspicious, because impurities generally flow into them. Water which may have become polluted in any way by the excrements of cholera patients is especially dangerous. Special care must be taken that water that has been used in cleaning vessels or dirty linen does not get into or near wells or standing and running waters. The best protection against the pollution of well-water is afforded by iron-tube wells driven straight and sufficiently deep into the earth (Abyssinian wells). (7) If it is impossible to get water that is free from suspicion, it must be boiled, and only boiled water used. (8) All this applies not to drinking-water alone, but also to all water used for domestic purposes, because germs of disease can be communicated to the body by water used in cleansing kitchen utensils, cleansing and cooking food, washing, bathing, etc. In general the belief that drinking-water alone is to be regarded as the bearer of the virus, and that one is completely protected if only unexceptional water is drunk, is urgently to be warned against. (9) Every cholera patient may become the starting-point for the further spread of the disease, and it is therefore advisable to send such patients to hospitals. If this is impossible, nobody must be permitted to approach them without necessity. (10) Never enter a house with cholera in it, except at the call of duty. Never visit places where many people are assembled in cholera times. (11) Never eat, drink, or smoke in rooms in which there are cholera patients. (12) As the evacuations of cholera patients are specially dangerous, clothes and linen soiled with them must either be burned at once or disinfected in the manner stated in the instructions published simultaneously with this. (13) The most scruptulous care must be taken that cholera evacuations do not get near wells or rivers serving as sources of water supply. (14) All articles which have come into contact with patients, and which can not be destroyed or disinfected, must be rendered harmless by means of hot steam in special disinfecting establishments, or not used for at least six days, during which they are kept in a dry and airy place exposed as much as possible to the sun. (15) Persons who come into contact with a cholera patient or with his bedding or clothing should wash their hands at once. Do not touch food with unwashed hands or put into the mouth eating and drinking utensils, cigars, or any thing else that may have been soiled in the sick-room. (16) In case of death the corpse must be removed to a mortuary as soon as possible. If it can not be washed there, it ought not to be washed at all. The funeral should be as simple as possible. The guests should not enter the house of death or take part in any funeral feast. (17) Articles of dress, linen, and other things that have been used by cholera patients or have been in contact with the corpses of such patients, must on no account be used or given to others till they are disinfected. Especially they must not be sent to other places unless disinfected. The receivers of packages containing such articles from cholera places are urgently advised to send them at once, if possible, to a disinfecting establishment, or to disinfest them themselves with the necessary precautions. Cholera linen ought not to be received for cleansing till it has been disinfected. (18) No other preservatives against cholera are known, and the public are advised not to use the so-called cholera-brandy and other alleged preservatives which are always extensively advertised in cholera times.—Medical Record.

Antiseptic Treatment of Pernicious Anemia.—At a recent meeting of the Edinburgh Medico-Chirurgical Society, Dr. G. A. Gibson read a paper on the antiseptic treatment of pernicious anemia. He referred to a case in a man of fifty-five, who had lived abroad, who had in his family a highly neurotic strain, as is common in pernicious anemia. He had had a stone in the right kidney, and had suffered from paroxysmal hemoglobinuria. His skin was lemon color. There was edema of the lower extremities, there was a large, pale, flabby tongue, and constipation. The red corpuscles were down to 800,000, and megalocytes, microcytes, and poikilocytes were present. Arsenic was carefully tried, but produced great gastrointestinal irritation, and had to be abandoned. Iron was useless. He was transfused by Mr. Cotterill on March 5th last, when six ounces of human blood in saline solution were injected. There was a gain of 200,000 red corpuscles in two days. This fell in a few days to a lower figure than before. He was now put on peptonized food, and on β-naphthol, 2 grains in pill thrice daily. There was soon a rapid improvement in the red corpuscles; they rose to 1,000,000, 1,700,000, 2,080,000, and finally to 2,320,000, while his weight had correspondingly risen to 12 st. 1 lb. Dr. Gibson also gave notes of a case of simple anemia which had been improved by β-naphthol.

Dr. Strachan. Dollar, referred to his experience of such cases, and specially to one which seemed to be of the nature of Addison's anemia, and which had been greatly improved by minute doses of Fowler's solution. He referred also to the character of the stools in such cases, their paleness and offensive odor.
Dr. Foulis was of opinion that progressive, pernicious anemia was essentially a disease of the liver, that it was due to a deficiency of bile, and such other of the hepatic secretions as prevented the intense putrefaction that took place especially in the large bowel in such cases. Evidence of this, he said, was found in the character of the stools, their color, but especially what he described as their "visible and tangible stench." He complained that Dr. Gibson had told them of a case of simple anemia and not enough of idiopathic anemia, and that he did not sufficiently differentiate the two.

Dr. A. G. Gillespie was quite unable to agree with Dr. Foulis' position. He was not at all satisfied that the evidence along the lines laid down by Dr. Foulis was sufficient to prove the disease to be a disease of the hepatic cells. He urged that too much had been made of the antiseptic value of the liver secretion, and said that that secretion, if taken from a biliary fistula and left to stand for a very brief time, underwent decomposition.

Dr. Keppie Paterson made some remarks on the good effect of β-naphthol in one or two cases of typhoid fever in children, which he gave in larger doses than Dr. Gibson used.

Dr. Gibson replied and specially pointed out that his purpose was merely to give notes on his treatment of pernicious anemia, and that he threw in a few words to indicate that he had tried β-naphthol also in simple anemia. His purpose was not to discourse at large on anemia, as Dr. Foulis seemed to think he ought to have done.—British Medical Journal.

Two Cases of Tetanus Treated by Injections of Antitoxic Blood. (Method of Behring and Kitasato.)—M. L. Rénon has observed in the service of Prof. Dieulaffoy two fatal cases of tetanus, but ten days intervening. The injections of defibrinated blood of rabbits, rendered immune against tetanus, were made by MM. Vaillard and Roux. In spite of the fact that these cases resulted unfavorably, it is believed that this report may render assistance in determining the proper dosage. Tizzoni reported his case in August of last year, followed by another in November by Nicoladoni, a third by Gagliardi, the fourth by Pacini, all being successful; the only fatal case, previous to the present ones, is that of Baginsky and Kitasato in January, 1890. Tizzoni believes that rabbit serum is more efficacious than that of dogs. The fatal results in these cases are to be attributed to the greater gravity of the disease and the longer duration of it before treatment was instituted. Success requires early treatment and large doses, although the necessity of applying the remedy at an early date detracts much from the value of the treatment. The injections appear to be entirely harmless, and to have afforded a prompt although temporary relief.—Annales de l'Institut Pasteur; Am. Jour. Med. Sciences.

Anthracosis—Small Pleuritic Thickenings.—Dr. J. S. Ely presented the lungs from a case of lobar pneumonia. They were removed from a man about fifty years of age, who was brought by the ambulance to the Roosevelt hospital in a condition of extreme collapse, and died almost immediately after admission. The autopsy showed the upper portion of the right lung completely consolidated and in the stage of gray hepatization. The visceral pleura was covered with a thin pellicle of new fibrin, besides some thickened fibrous bands from an old pleurisy. With the exception of these slight adhesions there were none in either lung. A portion of the left lung was deeply pigmented, apparently from the inhalation of coal dust. In addition to this, in very many places over the surface of the lung there are small gray spots, one eighth of an inch or less in diameter, each one of which is surrounded by a small black zone. These spots are slightly irregular in outline, do not seem to be elevated, and are scattered about equally over the upper and lower lobes of both lungs. In the upper lobe of the left lung there are many grayish spots, which are apparently due merely to a fibrous thickening of the pleura. They might possibly be mistaken for miliary tubercles. A microscopical examination shows them to be small areas of fibrous thickening in the pleura, and not in the lung under the pleura. They were unusually abundant in this specimen. In many other specimens they seem to be situated at the points of junction of the lobules.

In 1885 Julius Arnold, of Heidelberg, in an essay on the inhalation of dust, considered the small lymphatic structures scattered through the lungs, more particularly at the angles formed by adjacent lobules, very potent factors in causing these deposits of pigment. The speaker had thought these fibrous thickenings of the pleura might be secondary to the deposits of anthracotic pigment, but he had been in some doubt about this since examining them microscopically, as these gray dots, although surrounded by pigment, apparently have none within them. The thickenings are probably the result of small areas of inflammation on the pleura, which by interference with the circulation favor the subsequent deposition of coal dust.

The president said he had never seen them except in lungs which were much pigmented.
He suggested that they might be secondary to localized inflammations set up by irritating or infectious material brought to the surface of the lungs by the lymphatics.

Dr. Byron asked if these nodules were found to correspond to any lymphatics or capillaries in the tissue. This was a very important point in pathology, and might furnish a clue to pathogenesis of the lungs. It was not at all uncommon for these nodules to be mistaken for miliary tubercles. That they are not due to the pigment was shown by the fact that the nodules did not contain any pigment. He had made some experiments in connection with the subject under discussion, and he considered it worthy of close study and investigation. Tuberculosis, anthracosis, actinomycosis, leprosy of the lungs, he considered neoplastic infectious diseases, nearly always due to infection through the lymphatics, and that these nodules represented the first stage. He had found them not only on the surface of the pleura, but deep in the lungs.

Dr. Ély said that these were not simply lymph-nodules which had undergone interstitial change, for those in the immediate neighborhood remain unchanged. There were no tubercles in this patient.—Medical Record.

TREATMENT OF ENTERIC FEVER WITH CALOMEL.—At the one hundredth annual meeting of the Connecticut Medical Society, Dr. Gustavus Eliot, of New Haven, read a paper on this subject. Flint in 1880 wrote: "It is not an unreasonable expectation that an antidote or a parasicide, as effective in typhus and typhoid fever as quinine in malarial fever, may hereafter be discovered, and such a discovery is a proper aim for continued experiment observations."

Dr. Eliot has employed calomel in connection with tincture of iodine and carbolic acid; a method described by Dr. James C. Wilson, of Philadelphia, in January, 1883. Eliot orders ten grains of calomel every other day until four doses have been taken; and of a mixture containing one dram of carbolic acid, enough tincture of iodine to make four drams, he gives to adults four drops in a wine-glass of cold water every four hours.

At first he gave smaller doses of calomel, but experience led him to believe that ten grains was a safe dose and not larger than was usually necessary. In case the bowels do not move well after the calomel he employs dram doses of sulphate of magnesia in a little water every four hours till a good result is obtained. Rarely is slight salivation; for this he orders chlorate of potash.

This author then states the limitations to the utility of this treatment: First, the treatment must be early. Many do not try this till all other methods have failed and the patient is nearly dying. Others do not make the diagnosis quickly enough. Eliot believes that "with a reasonable amount of care, it is just as easy to make the diagnosis of typhoid fever the first time the patient is seen, as it is to make the diagnosis of pneumonia at the first visit." In doubtful cases it is better to put the patient "at once in bed, give him only milk for nourishment, and then, if you like, try the specific treatment." The author's treatment is begun too late in some cases, because the physician does not see them early in the disease. This he considers the reason why it is not more satisfactory in the hospitals. This method sometimes fails because it is abandoned too soon. In exceptional cases vomiting prevents the medicine from being retained long enough to do good.

The author has employed the treatment since 1884, all of his cases being in private practice. He has been convinced that treatment by quinine and hydrochloric or by salol is not satisfactory; turpentine and alcohol are of little value in mild cases, though very useful in the severe forms.

He concludes that "clinical experience has already demonstrated that the course of enteric fever may be abbreviated, the intensity of the fever lessened, and the severity of the general symptoms very much ameliorated by the systematic use of calomel in connection with the tincture of iodine and carbolic acid."

TREATMENT OF UTERINE HEMORRHAGE.—Routh (Practitioner, July 1892, p. 5) recommends that in case of profuse menorrhagia, and especially if metrorrhagia is also present, without obvious cause, the cavity of the uterus should be explored. The best means of exploration is rapid dilatation of the cervix with graduated bougies, under anesthesia. With rigid antisepsis there is practically no risk and rarely consecutive pyrexia, unless malignant disease or salpingitis be present. Even if tubal disease is present or suspected, exploratory dilatation of the cervix for hemorrhage of apparently intra-uterine origin is not necessarily contra-indicated, salpingitis often being secondary to and aggravated by intra-uterine disease. If fibroids of the uterus are evidently present, the immediate cause of the hemorrhage may be a removable one, such a coexisting polypus or fungous endometritis. The uterine cavity should therefore, when practicable, be explored before removal of the appendages or hysterectomy is considered. In some cases dilatation alone suffices to relieve hemorrhage and pain.
If exploratory dilatation were more commonly adopted prior to the employment of Apostoli’s treatment, it would lead to a more exact knowledge of the applicability of the latter and place its use on a more scientific basis.

Inoculation against Cholera.—Haffkine having found by recent experiments that anti-cholera vaccine prepared after Pfeiffer’s methods had the same action on various sorts of animals, ventured to try the inoculation himself. He injected subcutaneously in his left side a larger dose than that used in animals, of the so-called first kind of anti-cholera vaccine. The indisposition which followed lasted twenty-four hours, and consisted of a rise of temperature of 1° C., with headache, dryness of the mouth, and clouding of the urine, with no disturbance of the digestive tract. Locally there was pain, slight swelling, and glandular enlargement. The pain lasted five days. The swelling gradually diminished and disappeared on the ninth day. Six days after the first inoculation, Haffkine had the other side inoculated with the strengthened cholera virus (vaccine No. 2). Again there was a rise of temperature and local pain, but no swelling. The general condition was normal in twenty-eight hours, and the pain disappeared in three days. There were no digestive disturbances. The inoculation was tried in three other persons with similar results. In one of these cases a slight diarrhea which had lasted for several days stopped the day after the first injection. The inoculation of both kinds of anti-cholera vaccine, the protective power of which in animals has been experimentally proved, is harmless to men, and Haffkine entertains the hope that six days after inoculation with this vaccine, the human organism will have obtained complete immunity against every cholera infection.

Thyroid Grafting in Myxedema.—Macpherson (Edinburgh Medical Journal, May, 1892) reports the case of a woman, aged thirty-nine, suffering from myxedema treated by the above method. The patient had been the subject of the disease for three years, and her prominent symptoms were melanocholia with stupor and delusions of fear. Her extremities were cold, swollen, and blue; she refused her food, and was markedly lethargic; her movements were clumsy and slow, and she had exaggerated tendon reflexes. She had the waxy appearance of the face with characteristic flush on the cheek; the tongue was enlarged, soft, and flabby; there was well-marked supraventricular swelling, the hands presented the usual spade-like appearance, and the hair and nails were characteristic; she was anemic and suffering from headache; the men-ces appeared every fortnight and lasted a whole week; the urine was scanty. Within twelve hours of the operation there was a marked mental improvement; she became talkative and cheerful, and her intelligence and spontaneity markedly increased; the tear, the melancholia, and the delusions disappeared, and did not recur; the anemia and headache were also permanently removed; the average daily quantity of urine was increased, and the temperature, which had been subnormal, was raised; menstruation became regular. British Medical Journal.

Exalgine in Graves’ Disease.—Dr. T. Churtm, of Leeds, records the following case: A woman, aged twenty-eight years, of fair complexion, having typical Graves’ disease, had, after some months, extreme exophthalmos and congestion of both conjunctive, with ulceration of the left cornea. Leeches, lotions, etc., gave very little relief. At length, the pain becoming severe, exalgine was tried, half a grain dissolved in five minims of spirit of wine and a tablespoonful of water, every half hour, for three times, when pain was present. Next day not only was the patient free from pain, but the congestion had entirely disappeared; the eyes had changed from flaming red to perfectly white. During the next month, to satisfy himself and several critical observers as to the influence of exalgine, experiments were made; all the other drugs and appliances were tested in turn. The result was always the same: when exalgine was given the eyes were white, when it was omitted they became red and painful within a day, no matter what other drugs were given or lotions applied. As, upon trial being made, it seemed that the good effect was less marked when the whole dose of a grain and a half was given at one moment than when it was given in divided doses—half a grain every quarter of an hour for three times—it was ordered to be taken regularly in this manner every four hours.—London Lancet.

Injections of Testicle Juice in Tuberculosis.—Espagne and Pourquier (Nouv. Montpellier Méd., June 4, 1892) have tried hypodermic injection of testicle juice in a case of pulmonary tuberculosis. The patient was a girl, aged eighteen, without known hereditary antecedents, but of lymphatic temperament. There was harsh breathing nearly all over the chest, and dry crackling at both apices, especially on the left side and at the back. The girl suffered from amenorrhea and profuse night-sweats, and was wasting steadily. The testicle juice was prepared as follows: 50 grams of testical sub-
stance (from a bull calf) were macerated for twenty-four hours in 50 grams of sterilized glycerine. This preparation, after filtration first through paper and then through a Chamberland filter, gave a clear liquid almost as transparent as distilled water. The injection of a Pravaz syringeful of this liquid caused considerable pain, but was followed by a fall of temperature and reduction in the pulse-rate. The authors, however, are doubtful whether a repetition of the injection will be permitted.—*British Medical Journal.*

**Favus and its Treatment.—** Dr. Sheldon G. Evans, U. S. N., gives the results of treatment of one hundred and thirty-nine cases of this disease, occurring aboard ship, with few exceptions all the cases being among the apprentice boys. The origin of the disease was traced to an apprentice boy from Germany. The cases are not detailed, but the disease seems to have manifested no peculiarities. The treatment (which was suggested by the senior medical officer of the ship, Dr. Price) was eminently satisfactory. The hair was cropped short and kept so during the treatment. The effective remedy was an alcoholic solution of bichloride of mercury (1-500), applied with stiff brushes, the scalp being scrubbed with the solution every other day for a week or ten days, and then bathed twice a week with a solution of the same strength prepared with water and glycerin. When the scalp became inflamed, mild sulphur or mercurial ointment was used. The cases all improved rapidly, many were entirely cured, and none developed a second attack.—*Medical Record.*

**The Toxic Action of Impure Chloroform.—** DuBois-Reymond says that the difference found between the physiological action of pure chloroform produced by Pictet's process of refining, as opposed to that of the impure residue from that process, is as follows: (1) No difference was found in the pulse-waves nor in the frequency of respiration; the former being equally affected by both forms of the drug, the latter varying considerably. (2) The pulse-rate, compared in nineteen cases, is higher at the close of the experiments with residue than of those with pure chloroform. (3) The blood-pressure in by far the greater number of the experiments at the moment the respiration stops is higher after inhalation of pure chloroform than after inhalation of the impure residue. (4) The residue causes stoppage of respiration much more quickly than pure chloroform.

These experiments, conducted with chloroform refined by Pictet's process, from what is considered pure chloroform commercially, show how necessary is the testing of chloroform before its use, as even the best commercially is impure.—*British Medical Journal.*

**The Function of the Thyroid Gland.—** After an elaborate historical study of the theories which have been pronounced concerning the thyroid gland, and a discussion of the nature of its tissues, Horsley (Brit. Med. Jour., No. 1622) concludes "that the thyroid gland is a structure essentially connected with the metabolism of the blood and tissues; that in fulfillment of its functions it is hemapoietic both directly and indirectly, and that it secretes from the blood a colloid substance, which is transmitted via the lymphatics from the acini of the gland to the circulation;" and further, "that the thyroid gland is in functional activity before birth, and is of special metabolic importance in early extra-uterine life, while its value diminishes as the general vital processes increase." Indirect evidence affords weighty testimony in favor of the view that the thyroid is in truth the important organ of metabolic influence that the general results of thyroidectomy would lead us to believe it to be.

**Case of Dermatitis Tuberosa from Iodide of Potassium.—** Dr. Holsten reports the case of a child, aged sixteen months, who for bronchitis took two drops of a saturated solution of iodide of potassium every two hours; on the third day light reddish-brown papules appeared on the face and extremities. The general health improved, and the bronchitis disappeared. In all, less than a dram and a half of the drug had been taken. The papules became larger, raised, flattened, the color varying from pink to yellowish-brown, studded with minute whitish specks, from which, on puncturing, a thin white fluid exuded. A week later the lesions on the leg had assumed a fungoid or cauliflower appearance, bathed in pus, and bleeding easily. The lesions seemed to heal more rapidly under an ichthylolotion (10 to 30 per cent) than under several other modes of treatment used. The author, in his article, reviews the subject of eruptions from the iodides, and gives a bibliography.—*New York Medical Journal.*

**Tumenol and Its Uses in Skin Diseases.—** Prof. A. Neisser, of Breslau (Deut. Med. Woch., 1891, No. 45), has made use of this remedy for the past two years, and recommends it as valuable in the therapy of eczema, especially as an antipruritic. It is obtained from mineral oil by the action of sulphuric acid, and, while similar, is different from ichthyl. In concentrated form it is black, the odor not objection-
able. In tumenol two substances are present: (1) Tumenol-sulphur, always of oily consist-
ence, and designated “tumenol oil”; and (2) tumenol-sulphate, known as “tumenol pow-
der.” The former is insoluble, the latter soluble in water. A tincture may be prepared
from tumenol powder in two forms, as the following:

<table>
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<tr>
<th>Tumenol</th>
<th>Ether</th>
<th>Alcohol</th>
<th>Water (or glycerin)</th>
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<tr>
<td>5 parts</td>
<td>15 parts</td>
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That containing water dries quickly; that with glycerin may be followed by some dusting-
powder with advantage. For salves, pastes, and plasters the tumenol oil is to be preferred.
The remedy has been found useful in moist, subacute eczema, and in burns of the first and
second grades. It affects chiefly the superficial cutaneous strata. It allays itching, not only
in eczema, but also in the parasitic inflammations, and in prurigo, and in pruritus—in the
latter diseases especially, in the form of the tincture. In eczema with fissures, as about the
anus and scrotum, it proves valuable. It is also useful in superficial and deep ulcerations,
and in leg ulcers. It is not a parasiticide. Upon the general organism it does not seem to
exert any injurious effect.—American Journal of Medical Sciences.

Abortive Treatment of Erysipelas.—
Talamon (Münchener medicin. Wochenschrift,
1892, No. 28, p. 501) recommends the employment
of a spray of sublimated ether (1:100) in the
infiltration of some cases of erysipelas. If
the infiltration be not extensive, the application
is to be continued until vesication occurs; if
the involvement be extensive, the central por-
is only to be moistened; as the periphery is
reached the application is to be more vigorous,
and should extend beyond the line of demarka-
tion. But few applications are necessary. If
the eyelids are involved, they should be covered
with moist borated compresses.

Incipient Posterior Spinal Sclerosis in
A Case of Exophthalmic Goitre.—Wiener
(Inaugural Dissertation, Berlin, 1891) has re-
ported the case of a woman, twenty-two years
old, who, for four months following childbirth,
presented general nervous irritability, restless-
ness, palpitation of the heart, and itching of
the skin. At the twelfth year of age, one foot
was dragged for a period of time. Later there
was anemia, which was relieved by treatment
with iron. The patient was emaciated and
anemic; the pulse was 120; the left ventricle
was hypertrophied and dilated; the thyroid
gland was enlarged; the eyes protruded; con-
vergence was defective; the visual field was
limited; the hands were hot and moist; sensi-
bility to pain was diminished; the knee-jerks
were wanting; attacks of vertigo occurred;
memory was impaired; there was slight head-
ache.—Centralbl. f. klin. Medizin.

Anesthesia by Cocaine.—Dr. L. G. Rich-
elot reviews the discussions of 1891 before the
Société de Chirurgie, carefully weighing the
opinions of Reclus, Berger, Schwartz, Regnier,
Moty, and Trélat. Recognizing the advantages,
the economy of time, absence of vomiting, but
stating fairly the great disadvantage, the ab-
ence of sleep, which permits the patient to
know all details, he believes that its harmless-
ness has not been absolutely demonstrated. He
uses a two-per-cent solution, twenty five to
thirty grains, believing it to be the best of the
local anesthetics, but its harmlessness as com-
pared with chloroform must be determined.—

Treatment of Smallpox by Means of
Darkness.—Seven years ago Gallavardin drew
attention to a plan of treatment for smallpox
originally suggested and carried out by John,
of Gaddesdon, and Waters. The treatment
consisted in keeping the patients absolutely
away from all solar light. This solar darkness
had to be complete and uninterrupted, other-
wise no beneficial results were obtained.
The same writer now (Lyon Médical, June 12, 1892)
gives the result of his experience since 1876,
and finds that if this treatment be carried out
the disease presents no period of suppuration,
and that in consequence the subsequent scarring
is infinitesimal.—British Medical Journal.

The Treatment of Hepatic Colic by
Glycerin.—Dr. Ferrand has reported a num-
ber of observations which show the advantages
of glycerin over oil in the treatment of hepatic
colic. It is a cholagogue of itself, and can be
more easily administered, and is better toler-
ated, even to daily doses of an ounce. Admin-
istered with the same quantity of chloroform-
water it is better borne, and, as well, more
efficacious. In the intervals it should be given
in smaller doses, one to three teaspoonfuls in
one-half glass of alkaline water, as, for exam-
ple, in Vichy. He concludes that when ad-
ministered by the stomach it is absorbed by
the lymphatics; it is a powerful cholagogue; a
massive dose of one ounce will determine the

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THE AMERICAN PRACTITIONER AND NEWS. 181

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THE AMERICAN PRACTITIONER AND NEWS

Vol. 14. SATURDAY, SEPTEMBER 10, 1892. No. 6

D. W. YANDELL, M. D., (J
H. A. COTTELL, M. D., ) - - Editors.

A Journal of Medicine and Surgery, published every other Saturday. Price $3.00 a year, postage paid.

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THE CHOLERA OUTLOOK.

Since our last there have been no new developments of a marked nature in the progress of cholera on our shores.

The vigorous measures that have been taken by the authorities may succeed in restricting it to the limits of quarantine stations as has been done up to this time in New York. Still, it should not be matter of astonishment if we at any time hear of an effectual invasion.

We do not see, however, any great cause for alarm in the cholera outlook. In considering the history of past epidemics, and comparing the conditions accompanying them with those that bear on the present invasion, we find that many features of the prospect are decidedly favorable. A hundred-fold greater knowledge of hygiene is possessed by the public to-day than was available in previous invasions. Besides boards of health are everywhere in good working order, and there is a general state of cleanliness that has not hitherto been attained.

Still with all this there might possibly exist epidemic conditions in the atmosphere exceptionally favoring the spread of the disease, and which might disappoint all reasonable calculations. We all know what our duty is, viz., the greatest cleanliness and temperance, and for the authorities rigid quarantine, at least until the plague shall have broken through all barriers, for, once effectively landed on our shores, it is doubtful if the disease will not then spread in spite of all precautions.

THE "DEADLY" MICROBE.

A child tenderly brought up indoors stands a poor show when sent out to be exposed to the vicissitudes of the weather along with the hardy barefoot boy who has grown up amid all manner of exposure. Just so it may be in regard to the "deadly" microbe. If all our ancestors have been drinking a certain kind and quality of microbes with their water until the constitution of the race has become adapted to the surroundings, it is reasonable to conclude that all the harm they could do was done generations ago. It is the new microbe that is the dangerous one. All the old familiar ones might also become dangerous if we were kept away from them long enough for us to become unaccustomed to them. Might it not, then, be hurtful to have our water too clean, too free from microbes, unless we should continue to use it permanently in that condition?

Notes and Queries.

Editor American Practitioner and News:

THE WRONG PLACE.—I wish to say a few words through your journal to the members of the Kentucky State Medical Society on a subject which I think is of more than ordinary importance.

The hall in which the Society holds its sessions is the wrong place for exhibitors to display their goods, and unless the exhibits are arranged outside the hall it will be far better for the scientific interests of the Society not to allow any display during our meeting.

The exhibitors' stand becomes the lobby of the Society hall, and it is a thing impossible for the President to keep sufficient order for the audience to understand the speaker at the distance of thirty feet.

I take it that the object of the Kentucky State Medical Society is the dissemination of scientific knowledge by the reading and discus-
sion of papers prepared by its members; and when a paper is read, if it is not heard, it can not be discussed, and furthermore, it is very embarrassing to any gentleman while reading a paper to know that he is not heard and understood by perhaps one third of the audience, and that because of unnecessary disturbance.

I also believe that when a doctor prepares a paper to read before his State Medical Society, he at least regards it worthy the attention of those present, otherwise he would not present it.

The exhibitors' stand in a medical society hall takes from the meeting that dignity that should ever characterize the profession of medicine when they meet to discuss questions relating to the health and happiness of the human family, to discuss the principles of our life work, to prevent disease, ameliorate the condition of the suffering, and prolong human life, principles so noble that when understood and appreciated place us upon the top round of the ladder of human trust as men.

With this view of the subject I can not refrain from asking the members interested in the success of the Society to individually call the attention of the chairman of the Committee of Arrangements to this matter before the meeting in Frankfort next year.

I hope these few lines may so direct the attention of the members to the subject that they will go to our next meeting prepared to adopt a resolution that will forever place the exhibits on the outside of the hall in which the Kentucky State Medical Society may ever hold her sessions.

J. F. PURDOM, M. D.
910 W. Jefferson St.

The American Electro-Therapeutic Association.—A very full programme is announced for the coming meeting of the American Electro-Therapeutic Association which is to be held in New York, at the Academy of Medicine, 17 West Forty-third Street, October 4th, 5th, and 6th.

There will be two interesting discussions, one upon "The Relative Feticidal value of the different Currents and their Application to Ectopic Gestation," to be discussed by many prominent Gynecologists and Electricians, and another upon "Cataphoresis and its Practical Application as a Therapeutic Measure."


In connection with the meeting there will be an exhibition of Modern Medical Electrical Apparatus, all the prominent manufacturers being represented.

The social part of the programme includes many pleasant surprises.

Shall there be a Four Years' Course? An editorial under this heading, in the Medical News of July 30th, questions the desirability of encouraging a compulsory four years' course of medical study, as recently adopted at Harvard, the Woman's Medical College of Pennsylvania, and at the University of Pennsylvania.

The writer claims that the present college term occupies but six months of each year and that much time is now wasted in teaching subjects which should be required for admission, especially chemistry and physics. He makes the sweeping statement that "in no medical college in the United States is there even a pretense of a proper teaching of these fundamental sciences, or a proper entrance qualification therein demanded." This charge is specific, despite the writer was "dealing with a general
question and cited special schools, but by way of illustration, not with any view to special criticism."

If such were the case, it would indeed be well to correct these conditions before undertaking a compulsory four years' course, but we must assume that the writer is ignorant of what is and has been taking place at the Harvard Medical School, and we can easily believe that his statements misrepresent the actual condition of medical education in other leading schools of the country.

Twenty-one years ago the Harvard Medical School established a graded course, extending over three years, each of more than eight months of study.

Many of its students, college graduates, possess a considerable knowledge of chemistry and physics at the date of their admission.

All who do not hold a literary or scientific degree are required to pass an examination in the elements of physics, among other requirements for admission, and all, with or without degrees, who do not possess a considerable knowledge of chemistry on admission, have been given an elaborate course in this subject early in their medical study. The nature and thoroughness of the courses in chemistry may be inferred by an inspection of any of the examination papers, copies of which are printed in the annual catalogues.

Despite increasing qualifications for admission demanding better preparatory training, terms of more than eight months each and a third year largely devoted to clinical work, it has become advisable after these twenty-one years of experience not only to relegate the teaching of general chemistry to the preparatory schools but to add another year to the course of medical study.

This has become necessary, not as a preparatory year, but as a final year. The constantly increasing sum of medical knowledge, not of details but of essentials, demand it from the thoroughly educated physician. He needs his three months' vacation, but if his strength equals his enthusiasm the summer school offers abundant teaching in the hospitals, dispensaries, and laboratories.

The honest and earnest student in the four years' course will have no time in which to be idle, and a lack of honesty and earnestness is early found out in the graded course of study. The better his preliminary training the more will he profit from his medical studies. Reform is needed, not only at the foundation but throughout the structure up to the very roof, even to its ridge pole.—Boston Medical and Surgical Journal.

Everybody's Medical Duty.—Herodotus tells us that the Babylonians had no physicians, that when any one was sick he was carried into the streets and placed where the greatest number of passers-by could see him; everybody was bound to stop and consider the case, and if an individual paused who had suffered in what seemed to him a similar manner, he was compelled to explain the method of his cure. There is no necessity for this sort of thing now, although a large section of the public enjoys nothing more than suggesting remedies for all sorts of complaints, and dabbling generally in a little physic. But there never was a time in the history of civilization when there was greater need that everybody should recognize the fact that he owes a medical duty to his neighbor which he is bound to perform.

Dr. George Gould recently delivered an address in Philadelphia on the subject 'Everybody's Medical Duty,' in the course of which he bitterly complained of the way in which the public at large leaves the medical profession to struggle under its Atlantean world of deputed responsibility. The indifference, the want of sympathy, to say nothing of the actual opposition experienced by those whose work it is to contend against disease is as discouraging to our profession as it is disgraceful to our age of science. There never was a body of men animated by a spirit of devotion and self-sacrifice such as characterizes the medical practitioners of the age. How is this devotion and self-sacrifice recognized? The quacks, the charlatans, and the knaves make fortunes, while educated and conscientious practitioners are expected to do a large amount of work for nothing. Up to now the work of the physician has been the cure of sick persons. Now it has largely become the prevention of sickness. Patients
will co-operate more or less in the work of being healed of their diseases, and are not wholly ungrateful to the healer, but those who are in daily danger of becoming patients will do little or nothing to assist the men who are fighting to keep disease from their doors. They laugh at bacteria and mock at microbes; carry the germs of disease in their clothes from house to house; sweep up the dust of the streets in their trailing skirts; take little or no pains to disinfect the excreta from such infectious cases as occur in their own homes; oppose with all their influence the erection of hospitals for infectious diseases in their midst, careless as to what becomes of the patients so long as they pass not by their own doors; impede the efforts of medical officers of health and inspectors of meat and other food to improve the hygienic conditions of our towns and the quality of food we consume; disregard the authoritative condemnation of the corset, and in a multitude of ways help to make the work of the modern physician as hard as possible. Chaldea and Babylon could have taught us this, at least, that everybody is bound to help the State to the utmost of his power in the battle against disease and death.—British Medical Journal.

Cholera.—The epidemic of cholera in Europe has assumed alarming proportions during the past week. In Hamburg from 200 to 500 cases a day have been reported, of which about forty per cent died. This city has suffered much more than any other city of Western Europe. In Havre the number of cases has been from 25 to 75 a day, and in Antwerp, Amsterdam, Bremen, and Berlin, a few cases have occurred. It is doubtful whether some patients with choleraic symptoms which have been admitted to the Paris hospitals during the past week were suffering from Asiatic cholera or from the disease which has been present there during the whole summer. A few cases have occurred in England in seaport towns, mostly immigrants. Although but few cases are reported, they have been in different districts, as in Gravesend, Swansea, Glasgow, and Dundee, and one or two in London. In Russia, during the past week, the total number of cases reported has been about the same as before, but the number of districts attacked is larger. The principal factor in the distribution of the epidemic appears to be the emigration of Russian Jews.

The United States Marine Hospital Service and the State and local Boards of Health are taking active measures to prevent the disease from being imported. Although there is no law by which immigration can be stopped, still our quarantine and public health laws allow the different authorities to take vigorous measures to protect the community. An order has been issued for the port of New York that all vessels from cholera-infected ports, or carrying steerage passengers from infected localities, will be subject to quarantine detention of from two to five days for disinfection and observation. Similar orders are in force for other ports, and already several steamers have been detained and disinfected, although no case of cholera has yet been found.—Boston Med. and Surg. Journal.

Disparagement of our Professional Ancestors.—The following statement is found in an editorial in a recent issue of an American medical journal: "A hundred years or so ago our ranks were composed mainly of quacks and of impractical dreamers." Apparently this assertion is intended to apply to the profession not of this country only, but in general. Whatever the author’s purpose, the remark will be considered by us as relating exclusively to American physicians. We question its truth for reasons that will now be presented.

Many of the practitioners of medicine in this country during the eighteenth century were educated in the best schools of the Old World before coming to the Colonies; many others who began their studies here completed them in famous institutions in Great Britain, or upon the Continent; and still others, born here, had their entire medical education abroad.

More than a hundred years ago a successful medical school was in operation in Philadelphia, and one in New York, both established before the Revolution.

If the names upon the roll of medical teachers of "a hundred years ago" be compared with the names upon the roll of medical teachers of to-day, it will be found that there were
quite as famous and able men then as now. Such a comparison will do no discredit to the men of the last century.

In the early days of medical teaching in this country the candidate for graduation was required to write a Latin thesis; and, from an examination of some of these that we made a few years ago, it was evident that the authors had been carefully and capably instructed in Latin composition. These men had the mental discipline and the liberal culture that thorough study of the ancient classics gives. Here we beg leave to remark that we trust the day is distant when such studies shall be cast aside by those who are preparing to study medicine, sole attention being given to learning the physical sciences. However this may be, is it probable that students thus educated, "a hundred years or so ago," would be "quacks" and "impractical dreamers"? Would not the influence of such men rather have a strong tendency to elevate the profession? Is it probable, nay, even possible, that with such teachers and pupils there could be the condition described in the editorial we have quoted? To ask is to answer.

The times that immediately preceded the Declaration of Independence, which marked the Revolutionary struggle and the establishment of our system of government, were not favorable for "quacks and impractical dreamers" in any department of human effort.

If one recalls some of the illustrious names in the American medical profession in the eighteenth century, many of them those of great teachers, of eminent surgeons and practitioners of medicine, and observers and original contributors to professional knowledge, he will find that there were brave men before Agamemnon. The names of such men as the Bards, Baynhum, Boylston, Bond, Cadwalader, Clayton, Craik, Dorsey, Griffitts, Prescott, Redman, Romayne, Shippen, Tilton, the Warrens, Hugh Williamson, Caspar Wistar, above all in ability and fame Benjamin Rush, these, and more whose names might be given, can only be mentioned with reverent honor. Some of them were well known, not only in the profession, but also in council and in the field, assisting alike in the struggle for independence and in laying the foundations and erecting the superstructure of our national government. No man has occupied a larger place in American medical history than Rush. Caspar Wistar was not only an accomplished anatomist, but an excellent teacher of anatomy and clinical instructor. It is doubtful if Philadelphia has now his equal, as certainly the entire country has not produced the peer of Rush in medicine.

"A hundred years or so ago" there were several other great medical teachers, whose fame is part of the honor of the American profession. The motto of one of the oldest of English families is Non generant aquilo columbas; and so such men as we have mentioned, whether teachers or practitioners, men who were neither "quacks" nor "impractical dreamers," did not produce a race of doctors materially differing from themselves.

Recognizing the important advances in medicine, especially in its scientific character, and remembering that humility is characteristic of true knowledge, we ought to beware alike of exalting our own attainments and of disparaging those of our medical ancestors. It is probable that the contrast between the profession as it now is and as it will be a hundred years hence will be greater than is that between the former and the profession as it was a hundred years ago. — Medical News.

The Offspring of Mulattoes.—Dr. W. A. Dixon comes to the conclusion, from observations extending over a period of more than thirty years, that the popular impression is correct, that the offspring of mulattoes are the subjects of constitutional disease to a greater degree than those of unmixed blood; and when confined entirely to their own class, that is, without the admixture of pure negro or white blood, they scarcely ever reach the fourth generation in descent. In the community in which his observations were made there were a large number of persons whose parents on the father's side were white men of wealth and position. These mulattoes were for the most part tall and muscular and perfectly developed, and many lived to an old age. They commonly married mulatto wives, and their children intermarried. In many instances those of the first cross were
robust; those of the second paler, more ash-like in complexion, of slender form, and showed tendencies of diseases of a strumous type. The third generation showed less fertility and greater predisposition to disease; whereas the fourth were still less fertile, and their progeny suffered commonly from rickets and similar weaknesses. Scarcely any of this generation are in good health, although they have the same advantages of living as the healthy mulattoes of recent generation; and the negro and white families in the same community are perfectly healthy.

Tuberculosis exists to an excessive degree among the descendants of mulattoes; they are inferior in vitality, intelligence, and morality, and show a high rate of mortality. The author has found it quite noticeable that mulatto girls develop younger than either white or negro girls, and that as women they fade much sooner. Also that after the second generation of pure mulatto breeding practically all the children born are girls. The author remarks that it has already been proved in other races that human hybridity can not be maintained without reversion or fresh supply from parental blood. He suggests the possibility of the danger that tendencies to tuberculosis and other strumous diseases may be increased in the United States by the large mixture of nationalities which is taking place in it; and points to the immunity of the Jews and other unmixed races to these affections.

Whether the differences existing among our white population is sufficient to produce degenerate stock will probably not be determined for some time; but there seem to be no doubt that the weakness of mulattoes will prevent any large amount of mixture of the negro in the future American citizen.—Boston Medical and Surgical Journal.

Higher Medical Education.—Why is it that admission to the profession of medicine in Massachusetts is at a disadvantage compared with admission to the profession of law? The very last thing the law school or the law faculty would desire would be that their degree should admit to the bar. Other institutions have worked that out most thoroughly. Take, for instance, the school of law which is connected with Columbia College. It was demonstrated beyond a doubt that the fact that the law degree of Columbia admitted to the bar was a clear disadvantage to the school and to the profession. It is a clear disadvantage in medical education that the degree given by a faculty, a teaching faculty, should admit to the profession. The standard should always be outside, determined by another power.

Why is it that a full professor’s salary in the Medical School of Harvard University—I mean for gentlemen who give all their time to the school, not the gentlemen who are in clinical or surgical chairs—why is it that the salary of a full professor giving his whole time in the medical school is lower than in any other department of the University? Is this as it should be? That is the simple fact, it is lower; it is a good deal lower than it is in the other departments of the University. Here is a point on which change should be promptly effected, that it is not fitting that the services of medical teachers should be so much lower than the services of other professional teachers in the same university. At best the scale of salaries for full professors in Harvard University is lower than in many other institutions, but in our Medical School we have the lowest full professor’s salary. The gentlemen who serve in those chairs are of not less ability than those that serve us in law or in divinity or in the arts and sciences. They are not of less devotion.

All hangs on our English inheritances on this subject. In England the profession of medicine, the profession of surgery, does not now to-day stand on a level with the other learned professions. This is not the case on the Continent; it is conspicuously the case in England at this moment. They have the inheritance of the barber and the barber-surgeon still in their minds in England; and we have inherited two things from England, a lower standard of general education in the medical profession, the lower standard of requirement for admission to that profession or admission to the studies of the profession, and we have inherited this lower rate of compensation. I wish we could attach ourselves to the Continental schools of medicine rather than to the English in these regards. We have already far
surpassed our English brethren in procuring for the medical and surgical practitioner the right standing in the community, in procuring for the medical and surgical practitioner the same standing which the lawyer or the preacher or the teacher holds; but we have something still to do with regard to the scale of instruction, previous training, required for admission to medical schools; and we have something still to do in the medical schools themselves in putting them on the right and equal basis of endowment which other professional schools, the schools of other professions, have already established for themselves.

The progress in medical education in our own university and in the other universities of the land made during the last twenty years seems to me to be the most considerable progress that has been effected in any department of professional education within the same period. It is simply marvelous. When I look back on what was required of the medical school before the year 1870, not only in our own school but in many other schools, and compare it with what is required today, I see a progress which cannot be met in any other department of education, and I know that for that progress we are indebted largely to the prevailing sentiment in the medical profession. The Harvard Medical School would never have been able to carry out its changes of 1870-71, changes which reduced by nearly forty per cent the number of students in the school, if it had not been for the support received through the expressed public opinion of medical men; and I believe that the change which is now before us, the change to the four-year course, will require the same kind of steady and enthusiastic support.—President Eliot, Boston Med. and Surg. Reporter.

The Approach of Cholera.—The cholera may be said now to be epidemic, or at least present in all the seaboard cities of Northern Europe which lie in the route taken by the Russian refugees on their way to this country and England. Thus cases are reported in Hamburg, Bremen, Rotterdam, Havre, Antwerp, Dundee, Liverpool, and Glasgow, and other places, such as Berlin, and possibly London, have become infected secondarily from these centers. Hamburg may be said to be the chief of these distributing centers, and from that city travelers have carried the disease to many of the places above mentioned as well as elsewhere. In Russia the epidemic is nearly stationary.

The first infected ship to appear at this port was the Moravia. She left Hamburg on August 18th, the day cholera was discovered in that city, and arrived here on the 31st. Twenty-two passengers had died during the voyage. There is, however, no cause for apprehension that the disease will get further than quarantine. All the ordinary approaches to this country are fairly well guarded, but there are other ways than by the Atlantic seaports and on the European liners that the disease may creep in. One of these ways is by the West Indies and the Spanish Main. Vessels from Hamburg and other European ports sail regularly to Havana, Port-au-Prince, San Domingo City, La Guayra, and Vera Cruz, which places are also in regular steam communication with various points on our Atlantic and Gulf coasts, and it is not impossible that the disease may reach this country by some such round-about route, as it has before. Indeed, it is already reported to have appeared in Venezuela, where the war interferes with all enforcement of sanitary measures. Canada is also a weak spot, as the quarantine facilities there are admittedly defective. However, the Dominion authorities are fully alive to their danger, and forewarned is forearmed. The Hamburg American line has given notice that it will discontinue its emigrant service to New York until the cholera has ceased on the other side, and it is likely that the other transatlantic lines will do the same. "We need not feel especially grateful to their managers on account of this decision, however, as it was arrived at through no unusual consideration for the health of this country, but chiefly because the companies lose money when their vessels are subjected to long detention at quarantine.

Should it happen that the disease eludes the watchfulness of the quarantine officials, or enters the city by rail from other less efficiently protected ports, we are at least prepared to meet it as we never were before. The city is clean, there is an abundant supply of water
that is not likely to become contaminated with cholera germs, and there is good drainage. With all these conditions in their favor the sanitary authorities here ought to and we doubt not will be able to cope with the disease should it come, and keep it well within bounds. There is, in this city at least, no present cause for alarm. Prudence calls for scrupulous attention to the details of public and private hygiene, but that is all.—Medical Record.

The Significance of Fly-Bites.—We have now reached that point in the yearly circle at which, if at any time, might have been expected a continuance of warm weather. One sure earnest of summer heat (despite the recent rains, and, it may sincerely be hoped, merely temporary chilliness of northerly winds) has long been present with us in an increase in the numbers and activity of the household fly. It may appear fuzzy and unphilosophical to fret over this petty trouble, but we should be more than human if our patience were proof against its constant and obtrusive attentions. The sick especially have reason to complain of the annoyance it causes them. Happily, however, they are not quite without resource. The muslin fly-curtain or head-covering, the hand-switch, the fan, and a variety of other contrivances attest the practical ingenuity which has been enlisted on their behalf. Not least effectual, though as simple as it is generally unobjectionable, is the device of suspending a glistening cord above the head of the invalid. Comfort, however, is not the sole object aimed at by the treatment of the fly plague. The part played by insects in the inoculation of living germs has long been recognized, and it should be remembered that even the house fly, notwithstanding the weakness of its mandibles, is not incapable of taking a share in this work. In the Lancet of June 18th we showed how easily the fatal effect of the sting of a gad-fly might thus be explained. It is also a fact familiar to bee-keepers that the sting of the bee varies in severity under different conditions. May this not be attributable to the previous surroundings of the insect? We may also glean from the fact an implied lesson as to household cleanliness, and as to the necessity of treating by suction, poultices, or other convenient methods even so slight a matter as an irritable fly-bite.—London Lancet.

Unwholesome Occupations.—We have recently had occasion many times to report the sufferings of industrial workers from the inevitably unwholesome conditions involved in the industry in which they are engaged. Such is the case of lead workers, grinders, alkali makers, men employed in some weaving sheds, and many other occupations, of which Dr. Arlidge’s valuable lectures at the Royal College of Physicians—republished with additions in a volume recently issued—gave the most recent and temperate summary. The evidence produced by the unionist on behalf of working men and the testimony of various “hands” before the Labor Commission make up a very startling indictment of various classes and individuals among the employers, from which may be inferred a distressing, and in some cases highly culpable, negligence of the general sanitary measures and special precautions by which these evils can be alleviated. There is, however, another side to the question which it is unfair to leave out of view, and which, after some special investigations undertaken from time to time, has compelled us, and ought to compel all fair-minded persons, to practice a certain reticence in judgment until all the facts are fully disclosed. It is for that reason that, after a tolerably thorough investigation of the case of the alkaline workers at St. Helens, brought forward by the trades-union journals with many shocking details and much fervent denunciation, we felt it advisable to await the full investigation, of which the appointment of the labor commission afforded an opportunity, before publicly committing ourselves to any statement. The newly-published volume of the reports of the Home Office Inspectors of Factories sets out some of the details which indicate that the benevolent intentions embodied in the Factory Act or promoted by the inspectors are sometimes strangely thwarted by the persons for whose advantage they are designed. Thus, Mr. Brewer, of the Stafford district, mentions a new process introduced for the purpose of putting a finer surface on earth-
Extra precautions are necessary to protect the workers against the dust generated in this process and the evils resulting therefrom. But "in the scouring process the hands strongly resist all efforts to induce them to wear respirators. They maintain that respirators stifle them, and that these smell after awhile; but I believe the real objection is that they can not talk, and think the respirators disfigure them."

Mr. Cameron, of the East Metropolitan district, states that two large white-lead factories in the district have medical men of their own to supervise the arrangements, and much has been done to protect the health of the employed.

"Yet there are many difficulties, among which not the least is the callousness of the workers themselves. I give an instance of this. Recently at one of these factories a man was taken ill suddenly, and so seriously that, as the doctor informed me, he was pulled through 'more by good luck than management.' Convalescent, he was sent to a home at Bognor; he returned strong, able, and keen to resume work; this was, of course, refused. The doctor pointed out the extreme danger, and made him promise to undertake no such work in future, but to resume his original calling as a seaman. The man departed, instantly applied for work under another name at the other lead factory, described himself as entirely new to the work, was accepted, and died in a fortnight!"

Street Stenches.—A recent writer, commenting upon the filthy state of the by-streets in the West End of London, extols the Continental system under which the occupier is forced to sweep daily before his own door as far as his premises go and half the road in front of his house. The dust so collected is put into a box or basket, which is then allowed to remain on the pavement until the dust cart comes around to remove it. The police have the supervision and the enforcement of this sweeping. The writer considers that a great saving of expense is thus effected; but if it fell upon each occupier to cleanse and scavenge the street opposite his house—as was the case so far as the foot pavement is concerned before the passing of the Public Health (London) Act—the rate might be saved but not the rate-payer, for he would pay some one to do the work or do it himself—in either case expending in time or money probably a much greater sum than would purchase the cleansing of the small portion of street opposite his door by the municipality. The cleanliness of London pavements and roads and streets should always be a public matter, and we have no sympathy with certain local authorities who are agitating for the repeal of Section 29—compelling sanitary authorities to cleanse the pavements—of the Public Health (London) Act, but we wish the full intention of the section carried out. The by-streets in the west of the metropolis generally are insufficiently scavenaged; not a few are extremely offensive, being left from Saturday to Monday or Tuesday, or longer, without being touched, and Section 29 is in its practical result a failure. Why? The answer is obvious; most of the London surveyors opposed the clause in the London Bill placing upon the surveyors new responsibilities when the bill passed; the surveyors, backed up by the local authorities, have never risen to the occasion; insufficient labor is employed; the labor is not of the right kind; a third of the scavengers should be in hospital; too little advantage of mechanical appliances is taken, and nothing is done to encourage invention. For instance, who has ever seen in use in the metropolis a machine for cleansing pavements? Yet such are in existence. The city council will do a real service by making a searching inquiry as to the amount of labor and of machinery used in scavenging by each local authority. It would also be of considerable utility to encourage by grants of money the invention of improved appliances for sweeping, watering, disinfecting, and cleansing the public streets and pavements. The Public Health (London) Act is not in fault; it is the unwise parsimony of the local administrators. There is no valid reason why every metropolitan alley and court should not be at all times perfectly sweet—far more so than the corresponding places on the Continent, which we decline to take as models of purity.—British Medical Journal.
Dr. A. R. Brown Horner, Surgeon and Medical Director U. S. Navy, died August 8, 1892, at Warrenton, Va., aged eighty-eight. Dr. Horner had served sixty-five years and six months in the navy, and at the time of death was the oldest medical officer with the relative rank of commodore in the navy. He was three times appointed Surgeon-in-Chief of various squadrons by the President, for many years was appointed on the Naval Medical Boards, by seniority became Surgeon General of the Navy, was the author of "Cruise in the Mediterranean," of "Medical Topography of Brazil and Uruguay," and of "Naval Practice," the latter one of the first publications of the kind in this country. He was honorary member of the Philadelphia Medical Society and corresponding member of the National Institute at Washington. In private, social, and public life Dr. Horner lived up to the standard of a noble manhood. He neither used stimulants nor tobacco. During his long eventful life he displayed an unswerving loyalty to the Federal Union and mens sana in corpore sano. He gave testimony to his faith in the Gospel of our Lord Jesus Christ as the ground of his hope of salvation hereafter.

Tomatoes and Cancer.—Now that the time of the abundance of tomatoes is come, the voice of the cancer quiser is heard in the land, and such journals as open their columns to the anxious inquirer about things in general, and things medicinal in particular, are occupied with settling the doubts of those who are afraid to eat this succulent vegetable lest they should be sooner or later afflicted with cancer. Some of the answers are even more foolish than the questions, such as that of a correspondent who, while consoling the readers of the journal, whose subscribers were interested in the subject, assured them that the tomato is more likely to be a preventive than a cure for cancer. He adds that he has treated cancer "with great success;" "its cause is very simple" (simpler even than tomatoes), and he "does not think its cure should be so hopeless a case as it appears to be." If the popular belief were that this innocent and much maligned vegetable was a cure for cancer, we could understand it on the principle of the "doctrine of signatures," which is a superstition at least as ancient as Pliny. The tomato may be suggestive of certain tumors; to the ignorant mind reasoning from analogy of similar superstition, they should be considered as remedies for such diseases. That they should be believed to cause the disorder is as contrary to the tradition of the most respectable superstitions as it is contrary to common sense.—Brit. Med. Jour.

Inebriates and Repeaters.—In an interesting paper Dr. J. F. Sutherland gives some striking information as to inebriates convicted for various offenses against the law. He first points out that though over a million apprehensions, or 1 to 33 of the population, have been effected by the police in the United Kingdom during one period of twelve months, the number of individuals is very much less, one person representing in many instances from ten to fifty apprehensions in one year. More than half a million were for petty offenses. Of the 137,000 persons convicted of the more serious charges, 100,000 were first offenders or casualties, 27,000 intermediates, and 10,000 habituals. Women are three times more prone to these offenses than men. The connection between simple drunkenness and the three other petty offenses of disorderly conduct, breach of the peace, and petty assaults is most intimate, eighty-six per cent of the persons guilty of these other petty offenses having been drunk when apprehended. There are over 10,000 commitments of women to Glasgow prison in the year. These convictions represent 3,800 women, of whom nine per cent were imprisoned six, ten, twenty, and thirty times, and account for forty per cent of the whole. In Scotland a prison, or part of a prison, might be converted into a retreat for one section of inebriate offenders, and for another some of the now almost empty poor-houses under another name. For the refractory class, numbering about 700, cellular confinement might still be needed, and their work could be made fairly remunerative. The more docile, about 500 in number, might be treated in the poor-houses, and employed in outdoor farming or gardening work. A certain number of work-houses in Scotland might be trans-
formed into homes for inebriates, each with from twenty to fifty inmates. The present judicial procedure with inebriate offenders is a fia-co daily enacted in our police courts at great cost, the offending "repeaters" themselves receiving their brief and useless sentences with the utmost nonebalance. Of the present treatment of the habitual drunkard there can be written only "failure."—Ibid.

Dr. B. W. McCready, Emeritus Professor of Materia Medica of Bellevue Hospital Medical College, died in New York City on Wednesday the 10th inst. He was one of the senior graduates of old Barclay Street School, being of the class of 1835. He was over half a century in practice, leaving behind the record of a useful and honorable career. He was a good teacher, having filled a professorship of Materia Medica in the College of Pharmacy before 1860, at which time he united with Austin Flint, James R. Wood, Barker, and others in founding the junior college at Bellevue. McCready was for many years a physician to Bellevue Hospital. During his prime there were few therapeutical chairs that drew better classes than his. He withdrew from the active duty of that chair in 1872, and was succeeded by Dr. William Hammond. He was a member of the Association in 1853, and about that time he was the editor of the New York Journal of Pharmacy. Dr. McCready retired from practice about seven years ago.

Impure American Bromides.—Helbing's Pharmacological Record for May has an important statement concerning the undue proportions of potassium chlorate that are found in the bromides of American makers. An examination made by Helbing and Passmore show that it is a serious matter to buy the potash salt at the present time without having it carefully analyzed as to the percentage of chlorides it may contain. The English drugs in their original packages, however, are pronounced as safe. Samples of those products did not yield higher than 0.13 per cent of chlorate of potash, while four American samples carried from 4.52 to 5.96 per cent. The American Pharmacopeia permits of not more than three per cent, and the German about one per cent. The importance of purity in a drug of this nature is very great, and will receive the earnest heed of neurologists everywhere.—Journal American Medical Association.

The Pauper's Pipe.—Is it the case, as stated so widely this week, that there are only three work-houses in which the inmates of the work-house are allowed any tobacco, and that at Bourne, the latest of the three, "the consent of the local government board has been given on the condition that it is only allowed to men above sixty"? If so, why? We know all the objections to pampering the able-bodied pauper; but if tea, why not tobacco? Hard fare and hard work, if you please, for the worthless and able-bodied; but if one alkaloid of daily use and comfort, why not another? What is there to be said against the man's pipe that may not be urged against the woman's teacup? Surely this is an unreasonable and unnecessary privation, unless where punishment is needed and intended. We hope the example of the three unions will be contagious and widely followed.—British Medical Journal.

SPECIAL NOTICES.

"DURING the past year we had under care a young lady, the daughter of the mayor of a neighboring city, whose life was being greatly marred by a painful affliction of the eye, which had baffled the skill of several of the leading oculists of this country and Europe. It was finally decided to be due to a peculiar uterine condition. Only a few such cases have been known. She was altogether cured of the trouble, which had existed for over four years, by tablets of Ponce Compound.—Ed. Mass. Med. Journal, Boston."

"I have a lady patient, a married woman, who had one child fourteen years ago, a second child five years afterward, and is now seven months advanced in her third pregnancy. She has suffered for more than twelve years from endo-metritis, as well as chronic indigestion. During eight months of her second pregnancy she never ate a full meal, and as a natural consequence the child was weak and helpless. The first half of this pregnancy her health was wretched. Since then I have been gradually building her up with tonics. Five weeks ago fearing a miscarriage, I prescribed Ponce Compound. To a week the improvement was marked. She reported a day free from the slightest ache, pain or discomfort, the first in years. She has continued the use of Ponce Compound, and is now in better health and has a better appetite than since the birth of her first child. Also begins to hope for a strong, healthy child."

"J. P. FARRINGTON, M. D. Faison, N. C."
Original Articles.

DOUBLE SYNCHRONOUS AMPUTATION.*

BY R. CRAIG FALCONER, A. M., M. D.

In amputations as well as in other operations not alone are the progress and achievements of surgery demonstrated, but also the results and advantages of modern research, discovery, and appliances. Comparing the surgery of to-day with that of even twenty-five years ago, we realize how many vicissitudes and radical changes it has undergone; and these are more marked in the manner of treating stumps than in the technique of the operation. Three of the most prominent factors concerned in promoting the chirurgical art to its present degree of perfection are improved hemostatics, antisepsis, and drainage, since the control of hemorrhage, prevention of germs, and thorough evacuation of the morbid material are important and indispensable to successful amputations and other surgical procedures. We certainly have facilities for checking hemorrhage that our predecessors did not enjoy, nor did they pay much if any attention to antisepsis, although the law of absolute cleanliness has always existed. With some the drainage-tube is of doubtful utility, and there are unquestionably cases which seem to do just as well and perhaps better without it, while others demand free drainage which only the tube can satisfactorily furnish. In former years, the bleeding vessels being ligated with silk, and the

flaps approximated with the same material, adhesive strips were interposed between the sutures and extended over the face of the stump to dam up the pus and keep it in. The stump was then enveloped in a piece of rag besmeared with grease, and finally wrapped in a towel which served to hold in nature's revengeful spit. Thus the stump was allowed to be constantly bathed in its own reinfesting pus, the consequences being pyemia, sloughing, and pus-sinuses. Of course union by first intention was always impossible under such circumstances. It would not be fair to say that all cases so treated fare ill, though it is but reasonable in the light of experience to believe that many cases would have progressed better, and those that failed might have done well had they been differently managed. Both triumphs and diminished mortality bear testimony to the wisdom and efficacy of such treatment as is now applied to stumps. A double synchronous amputation for disease, other things being equal, is not so serious as for grave injuries with shock and exhaustion; but in either case, inasmuch as it is imperatively necessary that the duration of shock and anesthesia be diminished as much as possible, it is a good and safe plan to have two surgeons actively engaged in the operation, so that while one stump is being finished the other may be begun. Since sawing the bone seemingly increases the shock, and therefore jeopardizes the patient, it is the part of wisdom to avoid sawing the bones exactly simultaneously, and give the system a chance to recover, at least in a measure, from the shock incident to the sawing of one member before the other is sawed. In dressing stumps after double amputation I have always found it necessary to use splints, as the stumps are apt to assume a position at right angles with the body, causing tension of the muscles

* Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Society, May, 1892.
and retraction of flaps. In double amputations we ought to strictly observe the time-honored rule of saving as much healthy tissue as possible. Whatever consideration the prosthietical question merits in other less grave amputations, it is entitled to little or none in such synchronous amputations as I shall report, since the life of the patient is so seriously involved in these operations, and we are not justified in such a procrustean imitation as adapting living tissue to artificial limbs at the risk of human life.

*Case 1.* Carey C., colored, aged fourteen, was brought to St. Joseph's Hospital, May 5, 1891, with the following history: He was a healthy, robust boy until October 4, 1890, when he was taken sick with pneumonia, kidney trouble supervening, illness lasting about two months. Three weeks after convalescence his feet and legs began to swell, and were, the boy's father states, pricked with needles to allow the fluid to escape. But they continued to go from bad to worse till they became enormously swollen and "shone like glass." His feet and legs were next bathed in some domestic lotion—I believe made of mullein weeds—and, according to his father's statement, the swelling subsided and the feet and legs turned black; then a sore developed on the right knee-cap, subsequently another on the inner aspect of right knee-joint. When I saw the boy for the first time, in the afternoon of the aforesaid day, his feet and legs were extensively gangrenous and infested with swarms of larvae. His left leg, from the sole of the foot nearly to the upper third of the thigh, looked as though it had been charred, while his right leg was in a somewhat similar condition and almost disarticulated at the knee and ankle joints, the tibia and fibula being bared for half their lengths. He was emaciated to a marked degree, and still had a cough. Kindly assisted by Drs. W. A. Brock, D. H. Kellar, Milton Edmonson, and T. A. Jones, I amputated both thighs, the left one at the upper third and the right one at about the junction of the middle and upper thirds. As soon as I had transfixed one thigh, arrested hemorrhage, secured flaps, and in-serted drainage-tube, Dr. Kellar did the suturing, while I proceeded to amputate in like manner the other thigh. The operation, which lasted about three quarters of an hour, being finished, and the stumps dressed with iodiform, sublimated gauze, and cotton, I gave the patient a hypodermic of whisky, had him wrapped in blankets and placed in bed surrounded by hot bottles. Ether was the anesthetic used, as we found that the patient could not bear chloroform. He reacted from the etherization in due time, and was bright and cheerful. In the evening, about three hours after the operation, his pulse was 120, temperature 101° F.; there was slight oozing of blood from the right stump. On the following morning his pulse was 130, temperature 103.4° F. The dressings were removed and the stumps irrigated with carbonized water. His pulse, from the day of the operation to about twelve days afterward, varied from 120 to 140, and his temperature from 101° to 105° F. The pus was not as abundant as we might expect to find it in such a case where the tissues were so diseased. Drainage continued good, and the tubes were removed about the twelfth day after the operation. While there were both retraction and sloughing in each stump to the extent of exposure of the bones, this process progressed to a greater degree in the left stump than in the right one. To-day both stumps are entirely covered by sound and healthy tissue, and the boy is perfectly well, going to school every day, and weighs much more than he did just before the operation, if not more than ever. At present he has no albuminuria. As a tonic I gave him syrup of albuminate of iron and quinin.

Case No. 2. Robert T., a colored boy, about fifteen years old, has rather an unusual history. He states that in the afternoon of November 17, 1891, after his work in the country was done, he was going through a cornfield on his way to town. Tired, sleepy, and overcome by the cold, he lay down on a heap of corn-hucks and slept there until the following morning, when he awoke feeling cold and numb. Unable to proceed on his journey, he relapsed into sleep and claims to have remained in that condition for two or three days. Finally a party of boys found him lying in the field, and on
November 20, 1891, he was brought to St. Joseph's Hospital. On looking at the boy it was at once evident that he had been severely frost-bitten. Both feet and legs were swollen and as cold as ice; in other words, "frozen to death." They were also tender and painful, a burning sensation being felt, especially at the junction of the sound and diseased tissues. There was more or less delirium till the gangrenous process was well established. His temperature ranged from 101° to 105°. Pulse regular but feeble. The immediate treatment consisted of stimulants a d tr. chloride of iron internally, cold applications, and afterward hot antiseptic poultices applied to extremities. In the course of a week or so the line of demarkation was distinctly but irregularly formed about the middle of each leg. Drs. H. M. Skillman, M. T. Scott, J. H. Moore, and J. C. Carrick with me, both legs were bathed antiseptically and under chloroform amputated at the upper third. Drainage-tubes being inserted, the stumps were dressed with iodoform, sublimated gauze, and cotton, and then placed in light splints. After considerable suppuration and some sloughing, the stumps healed, and the patient has since made an uneventful recovery.

LEXINGTON, KY.

THE ETIOLOGY OF ATROPHIC RHINITIS.*

BY W. B. MCLURE, M. D.

Chronic hypertrophy of the nasal mucous membrane may ultimately result in atrophy of that membrane. The author of this paper has for several years searched medical literature, histological as well as common, in vain for a lucid explanation of just how this wonderful transformation takes place; and we modestly present the following explanation, which we believe to be not only logical but a true statement of histological facts. The nasal mucous membrane, like that of the larynx and trachea, is covered with stratified, columnar, ciliated epithelium. It also contains a large number of mucous secreting cells. Below the epithelium is a thick hyaline basement membrane, and underneath this a mucosa of fibrous tissue with numerous lymph corpuscles. In many places this infiltration with lymph corpuscles amounts to diffuse adenoid tissue. The chief characteristic of the muco-a is that it contains a rich plexus of venous vessels. In the deeper structure are imbedded small glands, the ducts of which open on the free surface of the mucous membrane. So much for the anatomy of the parts.

We will next attempt an explanation of the pathological conditions which are present in inflammation of the nasal mucous membrane.

First: There is a dilatation of the arteries themselves, which in a very short time is followed by dilatation of the veins together with migration of white blood corpuscles. This hyperemic condition at first produces hyper nutrition of the turbinate mucous membranes. This condition, however, is of short duration, for the reason that by continuous dilatation the turgor of the muscular coatings of the blood-vessels are at first weakened, and finally destroyed, leaving the blood almost stagnant within this hypertrophied tissue. The longer this turgid condition of the blood-vessels continues the more tortuous do they become, and this condition only adds another impediment to the already obstructed return of blood from the congested tissue. With the above existing pathological conditions we can readily understand the impossibility of a natural and free circulation of blood being carried on through these dilated, elongated, and tortuous vessels, deprived as they are of contractile force. As a result of the above condition, the current of blood is absolutely shortened and does not flow beyond the constricted portion of the arteries, which constriction is caused by a retraction of the diseased connective tissue beyond.

At this particular point the hypertrophy has reached its acme, and the stage of atrophy slowly begins to ensue. The first step in this direction is desquamation of the epithelial cells from the surface of the nasal mucous membrane. This exfoliation probably begins on the most prominent surface, which is that portion covering the turbinated bones. This desquamative process is the direct result of malnutrition of the surface, and as this anemic

*Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Society.
condition continues the desquamative process advances till the mucosa proper is reached. At this stage of the disease, instead of there being a slow desquamation of individual epithelial cells, crusts begin to form on the surface of the membrane, and it is from the decomposition of these crusts that we get the disagreeably fetid odor.

As stated in the beginning of this paper, the nasal mucous membrane is studded with mucous glands which pour their secretion on to the surface of the membrane. The importance of these glands may in a measure be appreciated when it is understood that they secrete and pour on to the surface of the nasal mucous membrane about sixteen ounces of fluid during every twenty-four hours. In the process of desquamation and crust formation these mucous glands are next, in turn, attacked by this destructive process in its onward march, and the secretion of mucus begins to diminish in quantity. When this stage of the disease is reached it may be likened to the withdrawal of a stream of water from the consuming flames; the destruction becomes more and more rapid as the amount of lubricating and moistening fluid diminishes in quantity. When this stage is reached the little fluid secreted and poured out at once becomes dry, and in the form of inspissated mucus forms on the surface in large scabs or crusts, and these crusts in turn, by their hardened and dried surfaces, become as a foreign body within the nostrils, and do an untold amount of damage by contact with surrounding parts, often extending across the lumen of the nostrils, and by impinging on the opposite surface set up a new inflammation on the septum.

The disease has now gone so far as to reach the small blood-vessels within the deeper structure, and as a result of the flaking off of the dried crusts from the surface we get bleeding. As is known, the periosteeum of the turbinated bones is simply the deep layer of the mucus membrane, and by reason of the cutting off the blood supply of this deeper layer we have atrophy, not only of the periosteeum but of the turbinated bones themselves.

In proof of my theory that atrophy of the nasal tissue is due primarily to hypertrophy and hyperemia of the mucous membrane, I will mention the fact that the membrane covering the superior turbinated bone, which, compared with the mucous membrane lining the lower part of the nostril, is only slightly vascular and rarely ever becomes atrophied. In my judgment the cause of this difference of susceptibility of the very same membrane in different parts of the same nostril can only be accounted for by reason of the fact that the one is richly supplied with tortuous blood-vessels, which favors hypertrophy, and the other is very scantily supplied with blood-vessels, and is therefore less liable to congestion with its consequent result of atrophy of that membrane.

I have often seen in the very worst cases of nasal atrophy the integrity of the mucous membrane covering the superior turbinated bones still preserved, and the power of smell only slightly impaired, showing that stages of congestion and hypertrophy have not taken place in that portion of the mucous lining, which lack of congestion can only be accounted for by reason of the absence of the vascular tissue so characteristic of the membrane lining the lower portion of the nostrils.

The foregoing, in my opinion, completes a description of the etiology of atrophic rhinitis as it actually occurs. And now, in conclusion, I will recapitulate, in order to make clear the points which I have attempted to bring out in this argument.

1. Atrophic rhinitis is the ultimate and logical result of neglected hypertrophy of the nasal mucous membrane, and never occurs as a primary disease.

2. Its chief cause is from lack of nutrition caused by cutting off its blood supply.

3. The atrophic process is by desquamative inflammation.

4. The chief point to which I desire to call attention is the apparent paradoxical statement that the beginning of atrophy of the nasal mucous membrane is due to anemia superinduced by hyperemia of the membrane.

If I have failed to make these points clear in my argument, it is because of an inability to express in language facts as they have appeared to me in a careful investigation of the etiology of atrophic rhinitis.

LEXINGTON, KY.
SUGICAL TREATMENT OF GENERAL SEPTIC PERITONITIS.*

BY J. C. CARRICK, M. D.

The subject of the treatment of general septic peritonitis is full of interest to every surgeon, for prompt decision and action determine the fate of the patient.

There is no reason why pus within the abdomen should not be let out, as well as pus within the pleural sac or within any other serous cavity; under such conditions the cavity is converted into a large abscess, and it should be drained; nor does it make any difference what the origin of this pus may be. The pus, if present, must be evacuated before recovery can take place.

One thing which stands in the way of the general adoption of the operation is the traditional fear of the peritoneum. If there is inflammation with pus formation, what worse can happen, what harm can the opening of the cavity do? Such incision made with care is in itself absolutely without danger, as has been proven.

In proof of the above statement I would call your attention to a most interesting case.

I was called on the 20th of August to see P. H., aged fourteen years; occupation, jockey. I learned from his father that two months from the time I first saw him he was sick about five days, and that he was confined to his bed half the time. He complained of his stomach; it was very much distended, but after the fourth day the distension gradually decreased and the boy resumed his usual occupation as a jockey, and he enjoyed good health until the 20th of August, at which time I was first called to see him. I found his breathing very difficult and his abdomen very much distended. I then proceeded to further examination of the patient by first taking the temperature, which was found to be subnormal, pulse 140, respiration 32, tongue heavily coated, and the entire body bathed in cold, clammy perspiration. I decided at once to aspirate, which I did several times, and each time removing about a quart and a half of fetid pus, at the same time giving my patient whisky and milk, carbonate of ammonia, and tr. digitalis. The patient gradually improved under this treatment until about the seventh day, and then it seemed he was going into collapse, and the abdomen again began to be very much distended. The case being of such a nature, I was desirous of the counsel of my friend Dr. Moore, and upon his arrival gave the patient a very critical examination. He gave it as his opinion that the patient had but a short while to live, which opinion was thoroughly in accordance with my own. After communicating to the father and mother our views, they then inquired if there was nothing further to be done. I replied by saying that the only alternative left was to open the abdomen and wash it out. They at once expressed their willingness to permit the operation.

In spite of the unfavorable condition I had the patient sent to the hospital, where I at once made ready for the operation.

The operation was performed by the writer, with the assistance of Drs. Moore and Hawkins, on the morning of September 8th, at 10 o'clock A.M. An incision was made in the linea alba, about four and a half to six inches long, midway between the umbilicus and pubes, and the dissection continued carefully down to the peritoneum. On opening the latter there was a gush of fetid pus to the amount of three and a half quarts or more. It was at once evident that I was dealing with a suppurative peritonitis. Large portions of the omentum had sloughed off, and the intestines were everywhere matted together, which had to be separated with my fingers. When the pus had all drained out the abdominal cavity was thoroughly irrigated with a warm solution of bichloride of mercury, 1-20,000 in strength, and then with distilled warm water kept up until it came away clear and free from any tinge or color. A large glass tube was inserted and carried to the lower portion of the pelvic cavity, and eight large sutures were then passed, and the wound was dressed with iodoform, carbolized gauze, oiled silk, and absorbent cotton. The time for the operation occupied about thirty-five minutes. Pulse at this time began to weaken. Hypodermic injections of whisky were freely used, which soon caused the patient to rally, and at 2 P.M. reaction was freely established.

* Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Society.
Before the operation, 9:30 A.M., the patient’s temperature was subnormal, pulse 140; next day, at 4 p.m., temperature 100° F., pulse 120; on fourth day, temperature 102° F., pulse 135. Dressing was removed and wound irrigated with solution of boracic acid; nourishment was taken freely every four hours. Next day, at 5 p.m., temperature 99° F., pulse 108. Up to this time very little morphine had been given. Bowels were evacuated without medicine; patient comfortable and cheerful, and wound dressed every day.

On the eighth day there was a sudden rise of temperature; the tube was removed and the abdominal cavity was again carefully irrigated with a weak solution of boracic acid; but on examination of patient’s lungs there was evidence of pneumonia setting up in the left lung, which was evidently of septic nature. The usual treatment for this complication was carried out. Up to this time the patient was doing well, but on the tenth day he began to grow very weak, and died on the fourteenth day after the operation.

I believe if I had operated sooner I would have saved my patient’s life.

LEXINGTON, KY.

SUPERNUMERARY BREASTS IN THE FEMALE.*

BY W. E. SLEET, M. D.

I was called, October 11, 1891, to see Mrs. R., aged thirty-seven years. Found her in second stage of labor, this being her eighth child. While preparing for examination she asked her nurse to dampen some flannel cloths with spirits of camphor. When asked for what purpose the wet cloths were wanted, she replied that she wished to dry up her breasts. After being told that she should nurse the child, she answered by saying that she was unlike other women in that she had four breasts, and thought that two would be sufficient upon which to rear the child. An examination proved that she had four well-developed breasts, one in either axilla besides the two normal breasts on the chest; the breasts in the axilla being well developed and about the size of a goose egg, the nipples being about the size of those of a cat. From the axillary breasts a semi-transparent milky fluid flowed freely. The breasts were developed during the gestation of the fifth child. When first noticed they were indurated and about the size of a small marble. Some weeks before the birth of the child they became much enlarged and softened, and exuded a milky fluid much to the discomfort of patient, who al-o suffered some inconvenience for some weeks before and after the birth on account of having to carry the arms extended nearly at right angles with the body. After the birth of fifth, sixth, and seventh children patient had subnud flow of fluid by local applications. Patient gave history of an aunt, who during the gestation of third child developed a sinus in the flexor side of left wrist, from which there flowed a milky fluid during each term of gestation and lactation thereafter—she being the mother of seven children.

Certain rare examples are on record of certain anomalies in the number and location of the mammary glands. In some instances three, four, and five distinct glands have existed instead of two. Some remarkable cases of malposition of the glands have also been reported. Dr. Robert, of Marseilles, in Magendie’s Journal of Physiology, reported a case where there was a well-formed mammary gland on the external surface of the left thigh, about four inches below the great trochanter. The mammary glands upon the chest functioned with regularity and were normal in all respects, but the gland upon the thigh secreted during lactation such a quantity of milk that the woman nourished all of her children, seven in number, indifferently from the three glands. He also reported that the mother of this woman had three mammary glands, one on the left side of chest and two on the right.

In the case of Mrs. R. there is no malposition of the glands, they being only developed from the lymphatic glands of the axilla. Remembering the anatomy of the axilla, we find that it usually contains ten or twelve large sized glands. A chain of these glands surrounds the axillary vessels, imbedded in a quantity of loose areolar tissue. These receive the lymphatic vessels of the arm. Other glands

*Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Society.
are dispersed in the areolar tissue. The remaining glands are arranged into two series: a small chain running along the lower border of the pectoralis major as far as the mammary gland, receiving the lymphatics from the front of the chest and mamma; the other glands are placed along the lower margin of the posterior wall of the axilla, which receive the lymphatics from the integument of the back.

Therefore may we not conclude that during gestation and the development of the mammae the axillary glands became stimulated and enlarged, and in this way Mrs. R.'s supernumerary breasts were developed?

Midway, Ky.

EXTERNAL URETHROTOMY WITHOUT A GUIDE.*

BY J. C. CARRICK, M. D.

Patient is twenty-seven years old, and is a clerk by occupation; his general health has been good up to three years ago; he has had gonorrhea a number of times, between the ages of sixteen and twenty-one. In the fall of 1889 he noticed that on urinating his stream was getting much smaller. On February 8th, on getting up to evacuate his bladder, he was taken with a sudden chill and found it was impossible for him to urinate; there was a good deal of vesical tenesmus, which came on about every ten minutes. I was called to see him hurriedly the same morning about twelve o'clock. I found him in great pain, the penis and scrotum extravasated with urine and swollen to an enormous extent. On thorough examination of his urethra I found that he had a stricture posterior to the bulbomembranous junction impermeable to the smallest filiform bougie. On taking his temperature I found it to be 103°, and pulse 120. The operation I performed was a perineal section or external urethrotomy, assisted by Drs. Moore and Roberts. The patient was placed in the lithotomy position, the parts cleansed and shaved. I proceeded first by making a long incision along the lower portion of the penis, and also splitting the scrotum into two lateral halves, which was to relieve the extravasated condition. I then began my perineal section in the median line, the incision being about two and a half inches long. I carefully dissected layer after layer until the urethra had been opened into upon a blunt sound previously introduced up to the front face of the stricture, having cut through the strictured part; the urethra was sufficiently incised to permit the introduction of a large sound; the stricture in the anterior portion of the urethra was divided by the Otis urethrotome; the urethra now being enlarged throughout to a uniform size, a rubber catheter, size 35, was then passed through the perineal wound into the bladder, and that viscous as well as the urethra was irrigated with a solution of boracic acid; iodoform gauze was packed loosely in the wound; the tube was removed on the fifth day.

After-treatment consisted in passing a large steel sound, size 15, English, every day for two weeks, and after the second week the sound was passed twice a week. In the course of ten days the urine passed by the natural channel. The patient was put on tonic treatment and supporting diet. The wound healed rapidly. In five weeks the patient made an excellent recovery, and is at present at work and in good health.

Lexington, Ky.

Societies.

MITCHELL DISTRICT MEDICAL SOCIETY.

Twenty-second Annual Meeting, held at West Baden, Indiana, July 7, and 8, 1892.

First Day—Afternoon Session.

The Society convened in the hall of the West Baden Hotel, and was called to order at 2 p.m. by the President, Dr. E. S. Elder, of Indianapolis.

After the transaction of some miscellaneous business the reading of papers was proceeded with. The first paper read was by Dr. C. W. Murphy, of Salem, Indiana, entitled "The Coal Tar Derivatives: Their Use and Abuse."

Antipyrin, acetaoilid, antikamnia, and pheneacetin being the most frequently used and important of the newly discovered chemical agents, the speaker's remarks were confined
principally to their consideration. Antifebrin and acetanilid are the same articles under different names. When the physician prescribes acetanilid he gives its pharmaceutical name; when he prescribes antifebrin he gives its proprietary name; the former is very cheap, the latter more expensive. Both are said to possess the same therapeutical effects, but a somewhat extended use of each one leads the author to believe that for uniform activity antifebrin is the more reliable. As there are no restrictions on the manufacture of acetanilid it is easy to understand how, as in the manufacture of other drugs, an impure article is sometimes placed upon the market.

All these agents come under the head of anodynes, or analgesics possessing the property of lessening the sensibility of the nerve centers or their peripheral extremities, but in varying degrees. They are also antipyretic in action, and it should never be overlooked that their effect on the system when fever is present is much more powerful than when it is absent; that doses of considerable size can be given for the relief of pain with impunity, in the absence of a rise of temperature, that would bring on a fatal collapse in high febrile conditions. While opium will always stand at the head of anodynes, its objectionable features of generally inducing constipation, cephalalgia, nausea, and deranged digestion cause us to make use of these less harmful remedies for the relief of pain in a large class of ailments. As an anodyne, antipyrin he believes to be the most powerful of all the aromatic series. It is especially useful in rheumatism as a palliative in relieving pain, reducing the temperature, and procuring sleep at night. In facial neuralgia, migraine, sciatica, pruritis, and neuritis it is an excellent remedy for the relief the pain. The dose should be ten or fifteen grains, and if the pain is not relieved in one or two hours repeat the dose. Antikamnia, acetanilid, and phenacetine are also useful in hemiania; and all four can be depended upon for the certain relief of hyperemic headaches. The speaker has many patients who prevent paroxysms of sick headache by one or two doses of antifebrin of six to eight grains each. Some get relief from antipyrin when antifebrin fails. He had used phenacetine in a number of cases of pertussis, and believes it serves a useful purpose in diminishing the severity and frequency of the paroxysms of coughing. For the relief of enteralgia, gastralgia, and other nervous affections of the bowels dependence can not be placed upon any of these; but antikamnia has given relief in a number of cases of the lighter forms of these affections. All of the series have a wide range of usefulness in the treatment of la grippe, in relieving the severe muscular and neuralgic pains, and in reducing the fever. He had cured in three days an eighteen-year-old girl affected with choreic movements of the left arm, neck, and face, of uncertain etiology, by giving ten-grain doses of antipyrin three times a day. He had also used antifebrin and antipyrin successfully in ten- to twelve-grain doses in simple nervous insomnia.

The use of all antipyretic remedies must be persisted in until the desired end, the reduction of temperature is secured; but the peculiarities of each patient must be studied and these agents must be administered in a way to suit each individual case. A dose that would give the desired result at one period of a disease might prove insufficient or excessive at another period; and a dose that would lower a temperature to the required degree in one individual might require double that amount to get the same result in another. Many authorities recommend giving five to ten grains regularly every three or four hours. This practice should be deprecated, for such a quantity is likely to disintegrate large numbers of red corpuscles, cause blueness of the lips, cold extremities, excessive sweating; subnormal temperature, and such untoward effects would more than counterbalance the good accomplished. It is well known that in nearly all fevers there is an evening exacerbation; usually the fever rapidly declines after midnight, and does not rise again until 10 or 11 a. m., and sometimes not until 2 or 3 p. m. A powder of seven or ten grains in the morning when the temperature has risen to 103° will generally keep it down below the point until 7 or 8 p. m., and occasionally it is sufficient for the twenty-four hours; but if it comes up again any time in the afternoon or evening another dose is given. Should
one dose fail to make an impression on the fever, which but seldom occurs, the author gives another dose at the expiration of two hours. In this manner, with from one to three doses, the temperature in almost all fevers is easily maintained below 103°; and, as already stated, it prevents undue tissue waste, lessens nervous irritability, promotes sleep, prevents delirium and complications, and therefore lessens the mortality.

The essayist, in conclusion, said that the opinion was entertained by many that the antipyretic form of medication does more harm than good; but he believes that such a conclusion is based upon improper dosage and too frequent administration.

Dr. William Bailey, of Louisville, had not prescribed antipyrin for years because of the disagreeable effects observed following its administration. He does not prescribe antikamnia because it is not strictly one of the coal-tar derivatives, but a made-up preparation, and ought not in his opinion to be prescribed. He uses phenacetine more frequently than all of the others together for the reduction of temperature, and gives it without hesitation under all circumstances. His method in the treatment of typhoid fever is to take care of the patients, feed them carefully, treat them with phenacetine and salol, and disinfect the alimentary canal by the nitrate of silver.

Dr. E. D. Laughlin, of Orleans, Indiana, thought the profession was down on antikamnia, and it had a right to be; that its antipyretic properties are entirely owing to the amount of acetanilid that it contains, seventy-five per cent of acetanilid, and twenty-five per cent of bicarbonate of potash, the preparation being made by a firm in St. Louis. He had found phenacetine an excellent thing pertussis and whooping cough when properly administered, three times a day. He had been able to control the paroxysms of cough with it. In typhoid fever he uses acetanilid in connection with other drugs. As an antipyretic he uses it almost exclusively. He had no disposition to change for the reason that it gave him satisfaction. He thought if bicarbonate of soda with acetanilid were taken together in bad cases of headache, they might be relieved.

Dr. J. M. Mathews, of Louisville, could see no justifiable reason why antikamnia should be ruled out of the list of remedies mentioned because it is a combination and put up by some house in St. Louis. The speaker said he had been a sufferer from periodical headaches all his lifetime; he had tried the coal-tar derivatives, some of them acting fairly well, others doing him injury; but antikamnia in his own case had given entire satisfaction, so much so that when he has an attack he can stop it almost instantly with antikamnia in fifteen or twenty-grain doses.

Dr. James T. Ball, of Judson, Indiana, does not use the preparation of antikamnia as put up by the St. Louis firm, but makes the combination himself. It is cheaper, and he considers it the safest of all the preparations he has used. To four ounces of acetanilid he adds one ounce each of bicarbonate of soda and salol, triturating thoroughly. This combination is identical both in appearance and effect with the preparation manufactured in St. Louis.

Dr. Dudley S. Reynolds, of Louisville, said the paper awakened in his mind a consideration of the whole subject of the treatment of the inflammatory, zymotic fevers, antipyresis, etc. In 1852 a discussion of Brand's method of treating typhoid fever was extensively indulged in by the French Society for the Advancement of Science. An eminent Frenchman had been making experiment with salicin, quinine, and some of the other alkaloids of the cinchona bark. All the great clinicians of France took part in the discussion. The impression was that high temperature means disintegration of tissue; it means the active processes of fermentation, and, carefully studied, most all the remedial agents employed against these processes will convince one that they are in the nature of anti-ferments. In the chronic inflammations of the so-called rheumatic people, especially the chronic inflammations of the ciliary body of the iris, all the different kinds of medicine used in the treatment of high temperature had been tried, all the eliminating agents, all the depleting agents and mercurial drugs, which had so long been held in high esteem by the profession, had almost entirely passed out of use. We now find phenacetine,
salol, salicylate of sodium, and more rarely pilocarpine bring about not only reduction of pain, discomfort, and of the general bodily temperature, which is always elevated in inflamations of the ciliary body, but actually dissipate the inflammatory process by opening up the lymph channels and tubes by destroying the ferment that excludes them, whether by dissolving some morbid effusion or by general diffusion it is difficult to say, yet the conviction in the minds of Frenchmen was that antipyretics are after all anti symotics, those agents which arrest fermentation.

Dr. E. S. Elder, of Indianapolis, expressed his appreciation of the paper, and was glad the author had taken such a bold stand in favor of antipyretic medication, as he believed that an unfounded prejudice had been created against their use by certain members of the profession who claim that antipyretics assist in producing heart failure. He believed that the injury charged to antipyretic medication resulted from continued high temperature, which meant increased metabolism or a burning up of the tissues, which of itself was disintegrating and weakening. Dr. Elder uses phenacetin largely in the place of anti-febrin. Antipyrin he has not used for some time. He relies both upon acetanilid and phenacetin. He considers it good practice in the use of antipyretic remedies to combine with them some heart tonic, such as strychnia or digitalis.

Dr. C. W. Murphy, of Salem, said if there was depression of the heart he used a cardiac tonic, otherwise not. He sometimes uses digitalis and nux vomica in combination. The principal reason for the condemnation of antipyretic medication by certain members of the profession he thought was due to an improper administration of the remedies themselves; that they were given in too large and frequent doses.

Dr. S. H. Charlton, of Seymour, Indiana, asked Dr. Murphy in what doses would he consider it safe to use these remedies, and how often. His experience was in favor of giving them in small doses. Five grains of anti-febrin were as many as he gives, repeated every two or three hours. He had treated cases in the country by sending these remedies in connection with other medicines without seeing the cases. He also desired to ask whether the essayist or any other gentleman had used antipyrin or any of the coal-tar derivatives in the treatment of cerebro-spinal meningitis.

Dr. Murphy said that he did not use phenacetin in the treatment of any kind of fever, that it was dangerous on account of its depressing effect upon the heart. As stated in the paper, he uses anti-febrin in reducing the fever. When the temperature reaches 103° he gives it in from seven- to ten grain dose, according to the physical condition of the patient. Five or seven grains he considers sufficient in ordinary cases to reduce temperature. If it does not reduce it in two hours, he would repeat the dose. He had had no experience with antipyretics in the treatment of cerebro-spinal meningitis.

Dr. William Bailey, of Louisville, thought phenacetin the safest remedy to give so far as the heart is concerned; but if he apprehends heart failure, instead of giving strychnia, he gives caffeine.

Dr. E. P. Easley, of New Albany, Indiana, was surprised to find that antikamnia had so many friends, as he thought it was a therapeutical outlaw. He reported the case of a young lady twenty-two years of age, weight one hundred and sixty-five pounds, in robust health, where, by mistake, twenty-four grains of antikamnia were given for an ordinary headache, with fatal result. He was firmly convinced that all antipyretic remedies should be prescribed with great care.

Dr. Dudley S. Reynolds, of Louisville, remarked in regard to dosage that in an acute attack of iritis or cyclitis in a patient able to go about, or who had no heart complication, one or two grains of phenacetin every hour would in about twenty-four hours dissipate all manifestation of the inflammation in many instances. Of course it was not always uniformly successful. He believes that small doses frequently administered will bring about the desired effect with more certainty and uniformity and with less danger to the heart.

Dr. William Cheatham, of Louisville, read a paper entitled "The Effect of Diseases of the Ear Upon the General Condition," in
which he cited some cases which had come under his observation in recent years. The ear and its diseases appear to be less understood by the general practitioner than diseases of the eye, yet the former is of much more consequence than that of the latter, as more serious results are liable to follow their neglect. A prominent lawyer of Louisville had just made one of his monthly visits to his office to have his ear cleansed, saying his nausea had returned. On that day the lawyer said to Dr. Cheatham, "Doctor, you cured me three years ago of a cough that had troubled me much for several years, that had resisted all previous treatment." The cough has never returned. He remembers syringing from his ear a mass of inspissated wax and pus, and relieving him by treatment of quite an acute attack of inflammation of the external auditory canal. As he was wiping out the patient's ear it made him cough, and recalled to him (the lawyer) what relief he had given him by removing that mass three years before. Since then he had visited him frequently complaining of nausea; he had what we call necrosis of the attic of the middle ear, which had never healed, suppurating slightly all the time, and every four or six weeks pastes over the upper and outer parts of the external auditory canal with dried pus. When this accumulates to a certain extent he suffers a great deal from nausea, and is obliged to have Dr. Cheatham remove it. This he does, and relieves his nausea until there is another accumulation. His first reflex trouble was a cough, this had been replaced by nausea. The suppurating surface in this case had no connection with the middle ear cavity.

Reflex symptoms of this kind are not uncommon; in all cases of obscure cough which he is called upon to treat, it is part of his routine examination to look into the ears. Auditory canals of different individuals differ as much in sensitiveness as other parts of the body of the same individuals do; but, that sneezing-cough, vomiting, and even epilepsy may be the result of reflex irritation from the auditory canal is beyond question.

Aitken records three interesting observations in which general symptoms disappeared after the removal of accumulations of cerumen in the auditory canal. In a little girl, eight years of age, with incessant cough, bad nights, frequent night terrors, loss of appetite, and emaciation, without physical signs of pulmonary disease, one of the ears was found blocked with wax. In a man, eighty-one years of age, with restlessness, tremor, derangement of digestion, and deafness, the ears were found filled with large masses of hardened wax. A girl, eleven years of age, with a tuberculous family history, presented elevation of temperature, frequency and irregularity of pulse, but without other signs of organic disease. An accumulation of wax was found in the ear.

Dr. F. C. Heath, of Indianapolis, Indiana, read a paper entitled "Practical Suggestions to the General Practitioner in Ear Troubles."

The purpose of the paper was to give a few suggestions in the management of ear troubles necessarily treated by the general practitioner, such as foreign bodies in the ear, earaches, and purulent discharges from the ear.

The foreign bodies most likely to be found in the ear are, in adults, forgotten masses of cotton and various insects; in children, pebbles, beads, corn, beans, and other articles put in the ear by the little patients themselves or their companions. Such cases are very likely to fall into the hands of the family physician. What is he to do with them? The most useful and effective instrument for the removal of these bodies is the syringe. Warm water should be used, and it should be gently injected. By this simple means the majority of foreign bodies may be quickly and safely removed from the external auditory canal. An effort should be made to direct the water to one side of the object that we may get on its return a vis a tergo. Otherwise the force of the water may carry the body farther into the canal. This danger is still greater in case of objects so large as to fill the lumen of the meatus. Straightening the canal by pulling the auricle a little upward, outward, and backward will facilitate matters. Beans, corn, and other articles likely to swell from contact with water should either be removed altogether with instruments (hooks, scoops, and forceps), or, if the syringe is used without success, there should be no delay in resorting to instruments. Insects may often
be killed by solutions of chlorinated soda or chloroform previous to removal with syringe. If the hook-like appendages of larvae become so attached to the tissues that syringing fails they may be picked out with forceps. While foreign bodies may cause trouble by exciting pain or inflammation, this is far less common and less serious than that produced by injudicious and unsuccessful efforts at removal. Destruction of the drum membrane, injury to the ossicles, loss of hearing, facial paralysis, and even death have resulted in these cases. It behooves the surgeon, therefore, to see what he is doing and proceed with care. The canal must be well illuminated and instruments manipulated in such a way that objects may not be pushed or allowed to slip further in. If unable to come up to these requirements, and where the syringe fails, the good of the patient as well as the reputation of the physician and of the general profession require the transfer of the case to more competent hands.

Accumulations of hardened wax may be removed usually according to the rules laid down, but some cases will require the previous use of an alkaline solution or other means for softening the mass.

A more frequent trouble in the practice of the family doctor is earache, often very severe. This may be a neuralgia from the teeth or other cause, in which case removal of the cause and anti-neuralgic treatment are indicated. But far more commonly it is due either to acute inflammation of the middle ear or furuncle of the external auditory canal. The greater pain, tinnitus, and impairment of the hearing in the former affection will aid in differentiating; also inspection of the canal and drumhead. It is a fatal mistake to regard the earaches of children as trifling; so many of them are attacks of acute inflammation of the middle ear, resulting in more or less impairment of hearing, and in some cases of course still more serious effects follow both in children and adults. The remedies used for these troubles are numerous and various. Some of the most disgusting are skunk oil and human urine. The means most effective both in furuncle and otitis media are heat and blood-letting. Heat may be applied in various ways: blowing in the warm breath, or dropping in hot water with a medicine dropper answers well in many cases. A hot-water bag placed against the auricle is very efficient; a simple substitute is a hot-water bottle wrapped in a towel or napkin against which the ear may be laid. But perhaps the best method in middle ear inflammation is douching the ear with hot water from a fountain syringe for ten or fifteen minutes at a time as required for the relief of pain. This should not be overdone on account of the macerating tendency on the drum-membrane, and the liability in furuncle to produce diffuse inflammation.

When hot applications fail, blood-letting should be resorted to. One or more leeches should be applied to the tragus (in front of the ear), not to the mastoid, unless that is diseased. They give great relief in middle ear troubles, but often fail in furuncle. The latter trouble may be relieved by painting with tincture of iodine or a twenty-per-cent solution of menthol in benzoïnol. We may incise, or, preferably, puncture early in the case, with less pain to patient after the formation of pus. In either affection morphia and atrophia solutions may be used, although not very reliable as a rule, nor so effective as the measures already suggested.

Purulent discharges from the ear trouble the general practitioner as well as the specialist. The origin of this discharge is sometimes in the external canal, but far more often in the middle ear. The doctrine that we should not meddle with the ear, that the discharge is salutary and not to be checked, is a pernicious one, held not only by the laity, but also by some of the profession. The fact is these discharges are often serious—caries of bone, meningitis, cerebral abscess, pyemia, and death are among the possible sequelæ. Pyoktanin is said to be effective in this affection. In using this, as well as silver solutions, care is necessary to avoid staining the clothes or person of the patient. Peroxide of hydrogen is contra-indicated in acute troubles of the ear, but very successful in chronic discharges. Although it is often used in full strength, the essayist prefers to dilute it, having seen it on one occasion produce severe inflammation.

But the question may occur to some practi-
tioner, "Shall I use the Pulitzer air-bag or other means of inflating the middle ear in these cases of earache and purulent discharges?"

Many a routinist thinks of this as a remedy for all ear troubles, just as he does of digitalis for the heart and atropia for the eye. Inflation is indeed valuable in many of these cases, but it should be used with care and moderation. In purulent affections it is an aid in cleaning out the ear and in earaches from acute (or subacute) otitis media it may be found of service. Inflation should be made gently and tentatively at first (if at all) in the acute stages of these troubles, lest they be rendered worse instead of better. But often by opening up the eustachian tube, dislodging pus, mucus or serum, restoring the membrana tympani to its normal position, and equalizing the air pressure on both sides of the membrane, pain is relieved, and inflammatory products are absorbed. This may be accomplished either by the Politzer or the Valsalva method, the latter consisting in puffing out the cheeks forcibly with nostrils and mouth closed. Sometimes the reverse is of benefit, swallowing with mouth and nostrils closed, thus causing a partial evacuation of the contents of the middle ear—air, serum, mucus or pus.

These suggestions are offered not as an exhaustive or technical discussion of the subject, but in the hope that they may not be entirely without practical value to the general practitioner in treating the common forms of ear troubles coming under his charge.

Dr. L. C. Cline said that ear cough, referred to by the essayist (Dr. Cheatham), was frequently overlooked by the general practitioner, who treated cases for months without benefit, thinking the trouble was in the throat or the bronchial tubes. He reported the case of a school-teacher who had been treated for nine weeks without benefit. Her cough was so bad that she could not sleep until after 12 p. m. without some anodyne to relieve it. Examining the ear he found it impacted with wax and suppurating. He touched the ball of wax with his probe and the patient screamed. The cough he thought was due to the wax in the ear, as its removal was followed by relief of all the symptoms. He had seen other cases.

Dr. S. E. Munford, of Princeton, Ind., mentioned a case of chronic suppuratiul of the ear in which he cleansed the ear with peroxide of hydrogen. About a week thereafter he had to chisel open the mastoid cells. He believed that the peroxide forced purulent matter into the mastoid cells.

Dr. Dudley S. Reynolds said that while the syringe was useful in removing foreign bodies and accumulations of pus from the ear, it was, at the same time attended with danger, and corresponding importance should be attached to subsequent inflation by the Valsalva or some other method.

Dr. S. H. Charleton said, in the few cases of suppuratiul of the middle ear that had come under his observation, he had perforated the drum and evacuated the pus early, the patients doing well. He had seen bad effects in some cases from negligence, but never saw a person die from suppuration of the mastoid.

Dr. C. W. Murphy asked Dr. Heath in what form he used boric acid, whether in powder form or solution.

Dr. Heath replied that he used it in powder form in the chronic cases. In the acute cases, if the suppuration did not yield quickly to cleansing measures, he would resort to the same as in the chronic form.

The papers were further discussed by Drs. Yost, Cheatham, Reynolds, Cline, Ball, and Bailey.

Dr. L. C. Cline, of Indianapolis, then read a paper entitled "The Effects of Intra-Nasal Obstructions on the General Health."

He said nasal obstruction in infancy is a matter of serious importance, as it may, in extreme cases, lead to paroxysms of dyspnea and pulmonary engorgement, or may subject the child to starvation through inability to nurse. Every physician of experience can recall cases of fretful, ill-nourished babes from this cause. The moment the proper supply of air is diminished the whole economy suffers for nutrition from deficient oxygenation of the blood. Typical examples of this are seen by every practitioner in children suffering from adenoid growths in the vault and enlarged tonsils, which give rise to the peculiar stupid facial expression. These children will all give histories of impaired ap-
petites, restless nights with night-mare, directly in proportion to the obstruction, and no class of cases will respond more quickly to permanent improvement than they when stenosis is relieved. Many of these cases can be traced directly to disturbed digestion and faulty nutrition, while the majority in children are due to traumatism, scarlet fever, diphtheria, and measles.

Those that are most liable to nasal obstruction from hypertrophy apart from the causes mentioned, are not, as may be supposed, those that live out and are exposed to climatic changes, but, on the contrary, they are those who live in-doors, such as work in dusty factories, stores, shops, and crowded cities, where they do not have sufficient exercise in the open air and sunlight.

Thus we find that these cases come principally from three sources: (1) Traumatisms, as falls or blows on the nose producing displacement of the septum, leading to hypertrophy and stenosis. (2) Scarlet fever, measles, and diphtheria are a very common cause of stenosis in the young, leading to hypertrophy of the glandular and epithelial structures. (3) From those who are closey confined and suffer from the want of exercise and sunlight. These points should always be kept in mind as they furnish the key to successful treatment.

It is Dr. Cline's firm belief from observation and experience, in some cases, that many infants are treated with all sorts of drugs and soothing syrups for colic when there is nothing the matter but earache, caused by nasal stenosis, and all that is required to give relief is to clear the nose and inflate the ear. Many cases of asthma and sick-headache can be traced to hypertrophy of the turbinates.

Dr. Cline reported several cases to substantiate the views he had advanced.

Discussed by Drs. Cheatham, Charleton, and Cline.

Dr. E. P. Easley, of New Albany, Ind., followed with a paper entitled "Hypnotics."

He said the list of somniferous drugs was long, and quite a number of them reliable, but no one of them was applicable to all cases or ages. Paraldehyde and somnal were so often repugnant to the taste as to be inadmissible. Bromidia, he thought, should have first place, with sulfonal a close second. Sulfonal in doses of 20 to 40 grains often acted magically with him. It should be given in solution, or it may pass entirely through the alimentary canal undissolved. It should be administered four to six hours before bedtime, as its action is slow. When sleeplessness is due to pain, opium or some of its preparations is the remedy. Papine is a most excellent form of opium, being almost wholly free from the disagreeable features that attach to the other preparations of this drug, and is well tolerated by very young children. One dram of it is equivalent to an eighth of a grain of morphine. It acts peculiarly well in the wakefulness of lying-in women. The syrup of Dover's powder the speaker had found to act well as a hypnotic in typhoid fever. Paraldehyde is seen at its best in the wakefulness of delirium tremens, but its nasty taste was almost unbearable.

Discussed by Drs. Reynolds, Bailey, Murphy, Munford, and discussion closed by the essayist.

Evening Session.

The Society was called to order by President Elder at 8 p.m. Dr. Dudley S. Reynolds's, of Louisville, took the chair, and Dr. Elder delivered the President's Address.

He said one of the most important considerations in connection with the meetings of the Society was to make them practical. The prime object should be to give the greatest amount of practicable information, so that every member will learn something that he can at once utilize in his every-day work. Dr. Elder then presented some thoughts relative to recent studies and teachings in medical science during the last year.

The past year has witnessed marked growth in many departments and a definite solution of many problematical questions. One year ago he presented to the Society a paper defining recent views regarding pyrexia, hyperpyrexia, and fever; that while animal heat was considered to be the result of metabolisms, yet it was directly influenced and controlled by the nervous system, and that the thermogenic function of the nervous system was one of its most important. This thermogenic function consists
of three factors, viz., heat production (thermogenesis), heat radiation loss (thermolysis), and heat regulation (thermotaxis); that a disturbance of either of those functions produced pyrexia or hyperpyrexia. And further, that these thermic disturbances alone were not fever, but that fever came on in connection with pathological conditions other than these variations of temperature. Those views have passed into the domain of accepted verities. We know now that the mere presence of abnormal heat is not the measure of the pathological process. We may have an exceedingly high temperature from retarded thermolysis, heat production being small but its escape retarded and a high temperature results. On the other hand, heat production may be enormous and its radiation equally rapid, consequently a high temperature does not ensue, yet our patient is most dangerously sick.

The most important advance in medicine during the last twelve months has been in the department of bacteriology. This vast field now yields fruits which are rapidly controverting old opinions and establishing on logical and firm foundations a new etiology, pathology, and therapeutics.

Dr. Elder then laid before the Society the very latest precise knowledge on the subject of bacteriology, as set forth only a short time since by Dr. George M. Sternberg, of Washington, after which he passed to the examination of a few more pathological conditions in the most advanced light of modern research. He called particular attention to erysipelas and diphtheria. Erysipelas has always been the source of controversy, its etiology and therapeutics were unsettled and unsatisfactory. Recent pathologists place it among the contagious, infective, specific diseases. That it is a disease of microbial origin seems incontestible. The contagiousness of erysipelas has been recognized for centuries, and on this account early attempts were made to include it among microbial diseases. The speaker touched upon the discovery of the streptococcus of erysipelas by Fehleissen in 1883; gave a description of it, and then dwelt at length upon inoculation experiments, the manner of infection, and the relation of erysipelas to phlegmonous inflammation and suppuration.

Viewing erysipelas as a microbial disease the treatment resolves itself into two prominent indications: (1) The destruction of the specific micro-organisms and prevention of its extension; and (2) the protection of the patient from ptomaine infection and from the invasion of putrefactive bacteria, and the general treatment to relieve the ordinary phenomena of inflammatory diseases, pain, fever, and functional disturbances of the various organs. As remedies to destroy the specific microbe and to protect against the invasion of putrefactive bacteria, the remedy par excellence is bichloride of mercury. Layers of cotton-wool saturated with a warm solution of bichloride of mercury, 1-3,000 to 1-5,000, applied over the inflamed surface and covered with oiled silk is the ideal local remedy. The speaker urged this treatment in lieu of all the various poultices, washes, paintings, coverings, or other applications so freely and indiscriminately recommended without any definite conception of their utility.

To fulfill the second class of indications, viz., to protect against ptomaine infection, either from the specific germ or that of putrefaction, and from the effects of functional disturbance of the various organs. There is nothing better than these remedies which experience has so positively proven beneficial, viz., iron, quinine, and supporting measures. These should be given freely and constantly. Opium to relieve pain, antipyretics to control fever, digitalis and strychnia to sustain the heart, cholagogue cathartics to secure excrementitious hepatic function, diuretics if needed to assist the kidneys in eliminating effete matter, stimulants and supporting measures, are all indicated, as a matter of course, in this as in all maladies of a febrile nature. His plea is especially for the antiseptic local treatment, earnestly and intelligently applied, thereby saving much constitutional disturbance, thus avoiding the necessity of much systemic medication.

Passing to diphtheria we enter a most interesting field. Its history dates back to the times of antiquity. Nothing in the history of medicine has more clearly shown the progress toward an exact science than the study of this subject. There can no longer be any difference as to the disease being primarily a local or a
constitutional one. It has been clearly proven beyond a question that a rod-shaped bacillus, first discovered by Klebs, alighting upon a susceptible mucous membrane, produces the characteristic local lesions. It has also been proven with equal certainty that the bacilli found in the diphtheritic exudate produce a chemical poison, and it is this poison that induces the constitutional symptoms.

Histological Changes. We owe largely to the labors of Wagner, Weigert, and more particularly to the splendid work of Oertel our knowledge of the minute changes which take place in diphtheria. According to Oertel "the diphtheritic poison induces first a necrosis or death of cells with which it comes in contact, particularly the superficial epithelium and the leucocytes. The deeper cells of the mucosa and of the other parts reached by the poison may be affected. The second change is a hyaline transformation of the dead cells, or, as Weigert terms it, the production of coagulation necrosis. The bacilli excite inflammation with the migration of the leucocytes, which are destroyed by the poison and undergo the hyaline change. The superficial epithelial layers undergo a similar alteration, and what we know as the false membrane represents an aggregation of dead cells, most of which have undergone the transformation into hyaline material. This is in all probability a conservative process, by which in a measure the poison is localized and prevented from reaching the deeper structures. The laminated condition of the exudate is probably produced by the inflammation of different layers. The formation of these foci of necrobiosis, starting from the epithelium and proceeding inward, is, according to Oertel, the distinguishing characteristic of diphtheria. The action of the poison is by no means confined to the superficial mucosa on which the bacilli grow. Although they do not themselves penetrate deeply, the contiguous bronchial glands show extensive foci of necrosis. In severe cases these necrotic areas are found in the internal organs, in the solitary glands of the intestines, and in the mesenteric glands."

The treatment of diphtheria consists of three factors: (1) Prophylaxis, (2) general treatment, and (3) local treatment. Cases of diphtheria should always be isolated. Clothing, utensils, playthings, books, and other articles having been in contact with them should be carefully disinfected. Boiling, fumigation with sulphur, soaking and washing in the bichloride solution are the measures to be depended on as prophylactic agents. Persons liable to exposure should use antiseptic mouth washes, etc. The two prime indications in the general treatment of diphtheria are first to prevent or limit the local development of the specific bacilli, and second to combat the effects of the toxic materials which they produce. The most important factor in controlling the disease is the local treatment. Antiseptic washes, douches, sprays, and gurgles are invaluable. Bichloride of mercury is the remedy par excellence, one to three or five thousand, used freely, often, and assiduously, offers us the most hope. Have patients to gargle every half hour bringing the fluid in contact with all the inflamed area and pseudo-membrane. A most important part of the treatment is to bring the medicine in contact with the specific bacilli. Frequently this can only be done by dissolving the false membrane. For that purpose applications of lactic acid and lime-water, vegetable pepsin (papayotin) and trypsin: Lactic acid and lime-water, 2 drams to 6 ounces, and trypsin and water, 30 grains to 1 ounce. These are the speaker's favorites.

Dr. U. H. Hon, Bloomington, Ind., followed with an address entitled "The Outlook of Life To-day." It was instructive and interesting.

SECOND DAY—MORNING SESSION.

The Society was called to order at 10 A.M. by the President.

Dr. Joseph M. Mathews, of Louisville, read a paper on How to Deal with Fistula in Ano.

He had once heard the elder Allingham remark that in his opinion "it required more surgical knowledge and dexterity to operate on and cure a complicated case of fistula in ano than any other surgical affection." The more Dr. Mathews met with this very troublesome disease the more he was persuaded of the truth of Allingham's assertion. Too little attention was given by authors of books to the details of the operation. He knew that the elastic ligature had
strong advocates in Dittell, Allingham, and others, but the procedure seemed so unsurgical and withal so unsatisfactory that but few surgeons had given the plan much indorsement. The more he used the elastic ligature in the treatment of fistula in ano the less he liked it. When compared with the knife in operating for fistula, all other methods must suffer by the contrast. What can be accomplished by the knife in a few minutes it took days or weeks for the other plans of treatment to do. Edges of wounds can be trimmed, additional sinuses sought for and divided, the bottom of all cut through, antiseptic surgery practiced, and a perfect cure effected when the knife is used.

Dr. Dudley S. Reynolds, of Louisville, followed with some remarks on "Abscess in the Attic of the Ear."

Dr. S. E. Munford, of Princeton, Ind., read a paper entitled "A few Notable Remedies."

The speaker dwelt principally upon strychnia, morphia, and phosphate of soda. To learn to respect strychnia we need to give it in a case of acute general chorea, according to the dosage instituted and practiced by Trousseau, or as near thereto as the courage of the practitioner will allow. He dissolved one grain of the sulphate in twenty teaspoonfuls of syrup (\(\frac{5}{3}\) sips), each teaspoonful containing therefore \(\frac{1}{26}\) grain of the salt. With children, according to the age, he administered at the beginning from one to three teaspoonfuls per day. Morphia, he thought, was given in larger doses than were needed to secure the desired effect. Phosphate of soda was chologague in effect, and if continued in sufficient doses it increased the biliary flow. It was helpful in all cases of gastrointestinal catarrh.

Dr. Allen Pierson, of Spencer, Ind., read a paper on the "Treatment of Varicocele." He referred to the recent monograph of Dr. G. Frank Lydston, of Chicago, in which some thirty or more operations were mentioned for the radical treatment of varicocele, nearly all of which were named after the operator who had been the chief promulgator of some particular phase of the operation. Nearly all of these methods seek to obliterate the diseased veins. The object of some was to make a suspender of the scrotal tissues, and by relieving the tension of the dilated veins give them the opportunity to recover their normal tone. These might be properly classed among the palliative methods.

Leaving out of consideration those methods in which caustics, remedies to coagulate the blood in the veins, and electrolysis are the agents employed to secure obliteration, the other purely radical methods seek to obliterate the veins (1) by subcutaneous deligation, (2) by open deligation, and (3) by open deligation with excision of a portion of the diseased veins. A clear understanding of what is to be done, and the simplest and safest manner of doing it were necessities, especially to one whose practice was private, away from hospitals or public institutions of any kind, in the homes of the people. The dread of operations on varices no doubt arose in part from the results in such methods as Vidal's or Ricord's.

With simplicity and safety in view we avoid making extensive incisions in a location where they become peculiarly a source of danger unless there existed some abnormality. In the normal arrangement of the veins, and in subjects where there are no calcareous deposits in this location, there ought to be no difficulty in isolating the veins from the vas deferens with its attending artery; this being done, subcutaneous ligation ought to be as easily accomplished as ligation in the open method. The speaker then went over the steps necessary in subcutaneous deligation, and closed by saying that the comfort of the patient, the freedom from complications, and the success of the operation depended upon cleanliness in a great measure; that in the few cases that had fallen to his lot to treat in this manner the secondary operation had been needed in none, and the operation had been ideal in all, and it was only because the tendency of the practice in these cases seemed to be in the direction of the open methods that this method was thus spoken of; that it might in some measure be a defense for its use.

Dr. G. Frank Lydston, of Chicago, read a paper entitled "Irrigation of the Deep Urethra and Bladder without Catheter or Tube."

From personal observation he had been led to believe that there was the greatest possible
variation in the resisting power of the deep urethral muscles and vesical sphincter. He had noticed that in some patients it was quite easy to force fluids into the deep urethra and bladder, while in others as much force as was compatible with the integrity of the urethral walls might be employed without forcing injected fluids into these parts. Patients themselves informed him that it was only with great care that they were able to inject the urethra without forcing the medicament into the bladder, while others never made such complaint. He was at first inclined to attribute this difference to roughness of manipulation, but experiments had since proven to his satisfaction that the experience of these patients involved a point of great practical interest and importance. He had for many months been using irrigation with a short urethral nozzle in the treatment of urethritis, and had therefore been able to gain some valuable experience in this direction. He found that in many patients there was little difficulty, the irrigator being at about the level of the patient's head, on the average, in irrigating the prostatic urethra and bladder without either tube or catheter. This is accomplished with no discomfort to the patient as a rule. He had utilized this practical point in the treatment of posterior urethritis to great advantage. One of the advantages of this method of irrigation in prostatic troubles was the facility with which hot water might be applied directly to the prostatic sinus. By carefully adjusting pressure by means of the fingers about the nozzle while the latter is in situ at the meatus, the entire urethra may be kept fully distended by the solution, while the excess of water is allowed to steadily escape around the nozzle. In the treatment of urethritis this method of irrigation was far superior to that usually adopted. A very promising feature of the method was the fact that the patient could easily irrigate his own bladder in quite a proportion of cases, something that he could not readily do with the catheter. The method is designed to meet the indications existing in a large class of cases in which irrigation of the bladder and prostatic sinus is demanded, yet catheterism was to be avoided if possible. Whenever we could accomplish the purpose of vesical or urethral irrigation without instrumentation, it was our duty to do so.

The following officers were elected:

President—Dr. Dudley S. Reynolds, Louisville, Ky.
Vice-President—Dr. C. W. Murphy, Salem, Ind.
Secretary and Treasurer—Dr. Geo. W. Burton, Mitchell, Ind.

Place of next meeting—Spencer, Ind. Time, December 29, 30, and 31, 1892.
The Society, after tendering its thanks to the management of the West Baden Springs Hotel, on motion, adjourned.

Abstracts and Selections.

Alcoholism and Its Treatment.—While differences of opinion still exist among medical practitioners as to the effects of the strictly regulated use of alcoholic beverages, all are agreed that alcohol, taken in large doses—a term which must always be interpreted relatively to the tolerance of the individual—or in small quantities frequently repeated, is one of the deadliest of poisons. It is an enemy, to use the words of remorseful Cassio, that not only steals away the brains, but wrecks and leaves in ruins the whole house of life. Though preachers and legislators, from Solomon and Lycurgus downward, have shown themselves keenly alive to the moral evil of drunkenness, our knowledge of its baneful effects on the body is comparatively recent. Evidence is now rapidly accumulating, however, which goes to show that alcohol is, directly or indirectly, responsible for more disorder of function, more varied and far-reaching lesion of structure, and more mental and physical incapacity and suffering than perhaps any other single known cause of disease. It is, perhaps, characteristic of our time that an evil which used to be looked upon as more needing the divine than the physician should now be coming to be regarded as a bodily disease within the range of our therapeutic batteries.

The satisfactory results which have followed the recognition of the fact that insanity can be more successfully treated by the ordinary medical art than by the exorcism of hypothetical evil spirits, seem to justify the hope that good effects may also be obtained by the application of the same principles to the treatment of drunkenness. Beginnings have already been made in this direction, both in our own country and abroad—especially in the United States; and
even allowing a liberal discount for not unnatural enthusiasm on the part of the pioneers of this new therapeutical advance, the results have so far been sufficiently encouraging to warrant the belief that they are on the right track. At any rate, considering the magnitude of the evil which they are honestly attempting to combat, their efforts should not be dismissed with the easy sneer of pseudo-scientific incredulity, but should be watched with sympathetic interest by all members of a profession whose guiding principle should ever be to "try all things and hold fast to that which is good."

A very full account of the methods of treating the disease of inebriety is contained in an interesting work by Dr. J. E. Usher, of Melbourne, which has just been published. Dr. Usher has not spared pains in collecting his materials; he has been in personal communication with most of the men of special experience in the treatment of alcoholism both in America and in Europe, and he has visited several of the "homes" and other establishments where the victims of the disease are received for treatment. From these sources of information, reinforced by his own experience, which has been considerable, he has compiled a book, which though small in size is solid in substance. The subject is dealt with in a candid and reasonable spirit that makes the reader disposed to look leniently on certain marks of haste in the preparation of the work. After some introductory chapters on the different forms of alcoholism, the pathological changes characteristic of the disease, Dr. Usher discusses its relation to insanity and crime. Under the head of "Alcoholic Trance and Crime," he cites, mainly on the authority of Dr. T. D. Crothers, some curious instances of crimes, such as murder and horse-stealing, committed by drunkards with every appearance of premeditation though without any consciousness or subsequent memory of the act. The records of the police court bear testimony to the frequency with which the plea of having been "drunk and knowing nothing about it," is advanced by defendants charged with violent assaults and other offenses, but the bench usually shows a decided disposition to accept this as an "extenuating circumstance." On the whole the judges are, we hold, right in this matter; for while it is no doubt true that alcoholism may induce a condition of trance or "cerebral automatism," which renders a man unconscious of what he is doing, precisely the same thing might be said of anger, which is, in the words of Horace, a "short madness." The day may come when medical experts will be able to diagnose mental anesthesia and paralysis of the moral sense with as much certainty as they now recognize corresponding lesions of the bodily framework, and to separate what is sin or crime from what is disease; but that time is not yet, and in the present state of knowledge those who administer the law can only be guided by broad principles which safeguard the interests of society, though their rigid application may in exceptional cases be hard on the individual. Upon the legal relations of alcoholism, however, the reader may do worse than consult Dr. Usher's book, where he will find a digest of authorities and leading cases bearing on the subject.

With regard to treatment, Dr. Usher, in the first place, follows those who plead for a modification of the present law, which would make the detention of inebriates compulsory, instead of being dependent on their own consent. "Habitual drunkards (criminal or otherwise) most be treated as diseased persons," and he urges that, as there are two classes of lunatic asylums, there should be two kinds of institutions, criminal and non-criminal, for inebriates. He does not, however, give any help toward a solution of the numerous legal difficulties which surround this question.

The most useful part of Dr. Usher's book is that dealing with the use of drugs in the treatment of alcoholism. He is no believer in any one preparation as the "sover'na'est thing on earth" for the cure of drunkennes. Like other diseases, it must be attacked on sound therapeutic principles; the "temperamental peculiarities" of the patient must be taken into account, and co-existent morbid conditions and tendencies must be combated and neutralized. An essential element in any method of treatment is the existence in the patient of a real desire to be cured. The first step, therefore, must always be the strengthening of such will power as the patient may have left, and the author is careful to point out that harshness, threats, and abstraction of sympathy are all out of place in such cases. Another necessary preliminary is to prevent the patient from obtaining alcohol. Dr. Usher describes in full detail the method of treatment which he favors. It consists in the administration during four or five days of a mixture containing nux vomica; sedatives, such as bromide of potassium, chloralamide, or paraldehyde being given at night, if the patient suffers from sleeplessness. The best hypnotic, in Dr. Usher's opinion, is hyoscine given hypodermically in doses ranging from \( \frac{1}{4} \) to \( \frac{1}{3} \) of a grain. If absolutely necessary, one ounce of whisky or brandy daily may be allowed, but not for a longer period than seven days. After the fifth day a mixture containing manganese and chloride of gold and sodium—why chloride of gold?—with the addition of strychnine if indicated, is given for
two or three weeks. Iron is given when a tonic is required, and euonymin with pepsine is naturally found useful when hepatic symptoms are prominent. Our author has also tried with good results the hypodermic injections of nitrate of strychnine, on which Professor Portougaloff and other practitioners in Russia, Germany, France, Italy, and elsewhere pin their faith, in alternation or combination with belladonna, and which is alleged to be the active agent in various secret and "institutional" treatments. Portougaloff has treated more than five hundred cases of chronic alcoholism by this method, with, he alleges, almost invariable success. Some of the patients relapse from time to time, but, to quote the Professor's own words, "a repetition of the treatment invariably sets them right for another year." Dr. Weir-Mitchell and Dr. J. Da Costa, of Philadelphia, Dr. Bowee, of Washington, Dr. J. G. Jewell, of San Francisco, and Dr. Edmund Andrews, of Chicago, also make strychnine injections the sheet anchor of their treatment of alcoholism. Dr. Branthwaite, the resident physician of the Dalrymple Home in London, has also used strychnine in combination with other remedies in a number of cases with excellent results. Dr. J. L. Gray, of Laporte, Indiana, gives chloride of gold and sodium with nitrate of strychnine and a small quantity of atropia internally, and also injects gold and strychnine under the skin. The patients are seen four times a day, and the gold and strychnine are rapidly increased until the limits of tolerance are reached. Whisky is given in carefully regulated doses. The treatment lasts from three to six weeks. Dr. Gray has treated more than two hundred cases in this manner, and believes that about seventy per cent are cured. Dr. T. D. Crothers is of opinion that cocaine, atropine, morphine, and strychnine may neutralize the alcoholic tendency, but he believes that a tendency to cerebral hemorrhage and heart failure often follows these methods of treatment. In many cases he has found that the tinctures of iron and cinchona appease the craving for drink. He treats alcoholism on general principles without relying on any supposed specific. He has had more than three thousand cases under his care, with a proportion of cures, after periods of from ten to fifteen years, averaging between thirty and forty per cent.

From all this it will be seen that the treatment of inebriety by drugs—though still, it may be supposed, in its infancy—has already proved its title to a place in legitimate medicine. In dealing with this disease two points have to be aimed at: first, the breaking of the vicious habit; and secondly, the neutralization of the immediate evil effects that may follow the deprivation of the accustomed stimulus. The former object is only to be attained by a determined effort of the patient's own will, aided, it need be, by force majeure in one shape or another; but drugs may be of service even here by causing symptoms which interfere with the patient's enjoyment of his noxious pleasure—in other words, by making him so ill in other ways that alcohol loses its charm for the time. It may perhaps be admitted that this is a legitimate method of treatment if it can be carried out without danger; that is to say, if the remedy is not as harmful as the disease. One of the objectionable features of more than one of these secret treatments, however, is that highly dangerous drugs, such as atropine, seem to be used for the purpose in a way likely to be most injurious to the patient's health. As regards the second point mentioned above, the use of strychnine as a substitute for the alcoholic stimulant to which the nervous system has become accustomed has a perfectly rational therapeutic basis; but here also the drug must be used with the utmost circumspection. As for cocaine, morphine, et hoc genus omne, though each of them may be beneficial under certain circumstances, their use is always fraught with the terrible danger that the devil of drunkenness may be replaced by another not less tyrannous and destructive.

After all, while gladly welcoming help in the war against drink, wherever it may come from, we are more inclined to rely for the ultimate suppression of the evil on the education of public opinion, on enlightened and well-directed legislation, and on the other methods of prevention advocated with such devotion and success by the National Temperance League and the other organizations which have banded themselves together in this philanthropic crusade.—British Medical Journal.

Glanders: Its Evils and the Cure.—The increase of glanders among horses, indicated by us in the early part of the year, has apparently continued, and the report of several deaths of human beings has aroused public interest. It is not creditable to the sanitary organization of Great Britain that in London alone £40,000 or £50,000 and a varying number of human lives are annually sacrificed to a disease comparatively easy of prevention. It can not be complained that the nature of the disease has not been studied, or that we have gained no positive knowledge thereon. Bacteriology has demonstrated the causal factor of the so-called glanders and fancy to be "bacterium mallei," and has extracted from a cultivation of the organism "malleine," which has a marked effect on the lesion, and is indicated for use on the diag-
nosis of the disease. The question naturally arises, who is responsible for the non-application of information which experimental science supplies?

The authorities are evidently alive to the prevalence if not to the dangers of the disease, and manifest some activity in prosecuting owners of affected animals. Surely sanitary science should provide other means in addition to the infliction of punishment upon the sometimes guilty, often ignorant, owners of affected animals. The power to deal with the suppression of contagious diseases of animals is vested in the Board of Agriculture, and effectual use of this power has recently stamped out foot-and-mouth disease and pleuro-pneumonia of cattle. This success is strong testimony to the advantage of dealing decisively by the action of a central authority with such epizooties. The defective state of administration of the laws relating to the diseases of animals largely depends on their permissive nature, or on the duties being assigned to local authorities.

A brief review of the laws referring to glanders will reveal some gross defects. Most striking is the recognition of glanders and farcy as two distinct diseases, for which different methods may be employed. Thus, while provision exists for the slaughter of horses, asses, and mules properly declared to be affected with "glanders," we find in the act and published official interpretation no such provision in cases of farcy. The distinction thus made between the manifestations of the same disease has been fruitful in maintaining the existence of the malady; for there is an impression, very generally acted on, that the subject of farcy may be treated by remedies, while the subject of glanders must be slaughtered. This slaughter is to some extent provided for by the Animals Order of 1886, Section 62, which is a fair sample of the regulations referring to the disease. The section is as follows:

"If in any case the owner fails to comply with the requisition of the local authority, he shall be deemed guilty of an offense against the Act of 1878, unless he shows that the animal is not affected with glanders."

It will be seen from this that more than three weeks may elapse after detection before an order for slaughter can be applied. Indeed, unless a horse affected with glanders has been exposed there is no power to deal with him except by fining the owner.

The chief defect, however, in the legislative measures for the suppression of glanders is the want of systematic inspection of horses and stables. The adoption of such a system could not fail to decrease our losses from the disease in question, and must be fraught with many advantages not only to horses but human beings who are necessarily brought into contact with them. There are no more unhealthy dwellings than those to be found in the lower class mans of the metropolis. Previous to 1885 the cow-sheds and their neighborhood afforded as little comfort and cleanliness. The Contagious Diseases (animals) Act of 1878 conferred on the Privy Council the power to make orders as to dairies, cow-sheds, etc. In 1886 the Dairies, Cow-sheds, and Milkshops Orders was promulgated. This order provides for the registration of all cow-keepers, etc., inspection of cattle and dairies, and for regulating, lighting, ventilation, cleansing, drainage, and water supply. The carrying out of the provisions of the order has had the effect of improving every condition associated with these matters, and the adoption of a thorough system of inspection of stables would be equally effectual.

We are pleased to note the action of the Cattle Trough Association, and ready to acknowledge the philanthropic spirit which instigated the provision of the troughs; but we must say, and that as forcibly as we can, that they must be regarded as potent means of spreading glanders. Any other view is impossible when we realize the facts that a discharge from the nostrils is the commonest accompaniment of glanders, that this discharge contains the virus which is not immediately killed in cold water, and that on entering by the respiratory or alimentary tract or through an abrasion it produces the disease. The provision of water taps from which each driver could draw his own pail would obviate all the risks arising from this source.

It has been currently reported that the Board of Agriculture would be approached on the subject of taking action to prevent further spread of the disease; but there does not appear to be any organization. Representations ought to be made urging the necessity of applying the pow-
ers already possessed with a view to the eradication of the disease.

Between eighty and ninety per cent of the cases occur in London and its immediate neighborhood. The factors specially conducing to this appear to be non inspection of horses and stables, want of power to slaughter immediately affected and suspected animals; open drinking-troughs (public and private), and turning horses out to grass without previous inspection or other precaution. The reality of the last danger is emphasized by the report that at a sewage farm near London last week, two horses out of sixty grazing in the same pasture were found to be suffering from glanders, and others were suspected. It is impossible to estimate the mischief which may follow the distribution of these animals to their several homes. The present situation is special, and appears to call for a systematic inspection of all stables and horses by experts specially appointed for the purpose and prohibited from engaging in private practice. Their districts would include various local authorities, and it would be necessary that the inspectors should be directed by the central authority. Power should be given to enforce immediate slaughter of affected and suspected animals, and in cases where, on post mortem examination, the disease was not found to exist, compensation should be given to the owner. Open drinking-troughs should be prohibited; and no animal should be moved for turning out with others without a certificate from an inspector as to freedom from the disease, and of not having been in contact with diseased animals. These are the most important points.

Compensation for all animals killed of glanders would doubtless prove an incentive to notification of the disease, and often an immense relief to deserving poor, who by loss of their horses are deprived of their means of sustenance. It is, however, difficult to see how statutory provision could be made for compensating the poor and deserving without placing a premium on trickery of the horse copers or unscrupulous owner. The door to the latter would be partly closed by the inspection suggested, without which we fear it would encourage fraud on an extensive scale. This danger has probably been recognized by the authorities, who in other diseases have made provision for it. It is to be hoped that in conjunction with vigorous inspection they may be able to devise some means for lessening the hardship of compulsory slaughter.—Brit. Med. Jour.

Calcium Sulphide in Tonsillitis.—F. P. Norbury has been very pleased with the effects of small doses of calcium sulphide in acute parenchymatous inflammation of the tonsils. These cases, especially if the subject be strumons, very generally tend to rapid suppuration. He has found that small doses (1/2 to 1 grain) of the sulphide, frequently repeated, are most valuable, both in preventing this suppuration or in hastening convalescence when the mischief is already advanced. Febrile symptoms and pain are both greatly modified under its influence. In abscess of the mouth and throat Norbury prefers to apply a solution of hydrogen peroxide to which has been added a little oil of cassia, which he finds a thorough and most efficient antiseptic.—The British Medical Journal.

Phencoll Hydrochloride.—Dr. Paul Cohnheim reports a very carefully conducted series of observations. As an antipyretic, a considerable effect was obtained from four grains; the largest single dose was fifteen, the largest daily dose seventy grains. In hectic, a seven-grain dose reduced the fever from two to four degrees; hence he concludes that it is equal to the more important antipyretics. In his cases it appeared to have no unfavorable action, nor to give rise to exanthemata. As an analgesic it failed in hysteria, in which other anti-neuralgic remedies and narcotics had failed. As an anti-rheumatic it was successful in aene, but failed in chronic articular rheumatism. In asthma there was no result.—Therapeutische Monatshefte; Amer. Jour. Medical Sciences.

On the Value of Methylene-blue in Malarial Fever.—Dr. W. S. Thayer, after reading the results of the experiments of Guttman and Ehrlich, treated seven patients systematically, and arrived at about the same conclusions as Myer:

1. Methylene-blue has a definite action against malarial fever, accomplishing its end by destroying the specific organism; but it is materially less efficacious than quinine, failing to accomplish its purpose in many cases when quinine acts satisfactorily.

2. The action appears to be rapid, the chills disappearing and the temperature in the remittent cases falling to normal during the first four or five days; but later, however, if a sufficient number of organisms have resisted the drug, they appear to develop again directly under its influence, causing a return of the symptoms.

3. Methylene blue seems to have no advantages over quinine which would warrant its further use.—Bulletin of the Johns Hopkins Hospital.
Cholera.

Though apparently shorn of his strength, Asiatic cholera is, Samson-like, groping blindly about the quarantine quarters of the New York coast defenses, with now and then a stroll into the city; and if the ceaseless vigilance of the health authorities be not maintained, he may at any time put shoulder to a pillar and bring down the Temple of Hygeia upon our too devoted heads.

To drop metaphor, cholera has jumped the quarantine so vigorously pitted against it in New York, and if it were not for the strict enforcement of sanitary rules against it in the city it would soon take up its line of march through the country. That it has not long since done so is a splendid testimonial to the efficiency of sanitary measures in our great metropolis.

This is a remarkable season. We have had hot weather up to the extreme limit of the time of frost, and yet cholera has not spread over the land. The chances are all in our favor that for this year we are on the list of exemptions; but that is no reason why we should not by every means in our power take measures against the probable invasion of our land next year. If the history of former epidemics counts for anything, cholera will take an early start next summer, with results that have to be felt to be known.

In view of these considerations, the able address, before the National Health Society, of Mr. Ernest Hart, chairman, and editor of the British Medical Journal, is full of vital interest. From this we quote the following pregnant paragraphs:

Importation of Cholera Inevitable: Period of Incubation.

This was inevitable under the existing circumstances. The incubation period of cholera was stated by medical authorities at from one to fifteen days; its average was put a two to five days. So that it was quite possible—indeed, unavoidable—that many should pass through our ports in apparent health who after a few days developed serious or fatal cholera.

Quarantine had been defined as an elaborate system of leakiness; impossible if it were complete, because implying isolation and arrest of intercourse; useless and dangerous if incomplete, because inviting a false reliance and offering a false security. Medical inspection, with the powers of detention, was a more real precaution and more easily made effective; but under the circumstances it was only a sieve which would strain off the coarser majority of cases, but through whose many apertures the more subtle were already passing, and would pass.

Armed with old and new knowledge we might grasp the nettle with a good heart, and would find it robbed now of much of its former sting.

Cholera no Mystery.

We might lay aside all pedantry and mystery-talk of “epidemic constitution,” “pandemic waves,” “teluric influences,” “cholera blast,” “cholera clouds,” “blue mists,” and the like terms of art with which an amiable class of meteorologists had delighted to cloak ignorance. Asiatic cholera was a “filth disease, which was carried by dirty people to dirty places.” “Filth disease” was the plain English for epidemic, and it was sometimes the victims of the “dirty people” who were the carriers of the poison; it only developed where it found dirty places in the sanitary sense, and dirty habits of drinking polluted water and living on a polluted soil.

We Eat Cholera and Drink Cholera, but do not “Catch” it.

Cholera did not travel by air waves or blasts. We could drink cholera and eat cholera, but we could not “catch” cholera in the sense in which we catch measles, scarlatina, or whooping cough, so that we had ascertained that with proper appliances and due precautions (of which he would speak later on) the sick could be nursed without fear of the nurse catching the disease. Cholera was carried by men in their clothing and their secretions along the lines of human
intercourse. Earlier epidemics of Asiatic cholera took three years to reach us by caravan and fitful travel from its Asian home. It came now not as a pedestrian or a horseman, but by locomotive and fast steamboat. The present epidemic raged in Kashmir in May, and had traveled to us in three months by the Trans-Caspian and Trans-Caucasian railways, and, mounting the Volga by steamer, it had found in the filthy of Russian villages and towns ample material for devastating conflagration by the way, destroying 5,000 to 6,000 lives daily in the Russian Empire as it passed along.

The Epidemic at Hamburg: Its Explanation.

Hamburg, which had been poisoned by immigrants and sailors from Russian ports, had unhappily presented filthy conditions not inferior to those which had invited the devastations recently of Russia, and, of late years, of Naples, Sicily, Spain, Marseilles, Toulon, and the mild outbreaks of Paris, all epidemics spread by filth in water and soil, of which Mr. Ernest Hart stated he could give, if time allowed, exact, authentic, and fully admitted details. Most of those cities had learned the lesson and taken it to heart more or less completely; to the extent to which they had done so they would have relative immunity in the future. Hamburg had not; the Elbe was filthily polluted, and it furnished the drinking-water of the city, very ill-filtered or unfiltered. The drinking of the water, except after boiling, had now been strictly forbidden, and the river baths were closed. According to the extent to which these edicts were rigidly enforced and carried out, the present epidemic would be limited and rapidly decline. This would do more than the "sprinklings" with tons of disinfecting powder and "vague libations" of thousands of gallons of antiseptic fluid, of which much has been heard during the last few days. Hamburg had sinned against natural laws, and was unhappily paying the penalty in suffering: "The soul that sinneth it shall die."

The Duties of the Citizen.

There remained what was perhaps most important of all—the duties of the citizen. They might be summed up in a few emphatic sentences. The National Health Society would supply in quantity cheap handbills and directions in simple words for the use of district nurses and visitors and those who worked among the people. He need not repeat the now well-known directions. In the words of Miss Nightingale, "Scavenge! Scavenge! Scavenge!" Keep your houses, your eisterns, your stables, your cow-sheds, pig-sties, and slaughter-houses, your drains, your yards, your dust-bins, yourselves, and your clothing clean, and help your poor neighbors to do so. Boil your water, or drink a pure natural table-water. Boil your milk (and here the lecturer gave an example of a well-defined cholera outbreak spread by contaminated milk). Inspect your fruit, fish, and meat markets. Avoid unsound food and excesses of diet. Feed wholesomely the needy and destitute; help the poor to be as careful in their homes and habits as you will be in yours. As to contagion in the ordinary sense, have no fear. Cholera is communicable in the ways mentioned, but not "catching" like infectious fevers or measles or scarlatina. If you take cholera, it will be because yourself or those about you have made you liable to it by neglect.

Preventive and Curative Drinks and Medicines.

Put not your trust in nostrums; cholera does not "come by Providence and go by medicine," although that is a common and ignorant belief in respect to it and many other diseases. A tried and safe preventive of the tendency to diarrhea (which should always be checked) is sulphuric-acid lemonade, made by acidulating boiled and sweetened water to taste with dilute sulphuric acid, or, as at the post-office, Dr. Waller Lewis's very palatable sulphuric orangeade. The citric-acid lemonade lately vaunted was rather inferior in value to this. The cholera bacillus, as we now know, was favored by an alkaline fluid, and did not live in acid media. An excellent and well-tried preventive of the prevalent slight diarrhea was the Vienna mixture (used in barrels formerly in hospital practice). It consisted essentially of 15 drops of dilute sulphuric acid to 6 ounces of boiled and sweetened water, to which might be added, under medical advice, 10 drops of sulphuric ether and 5 drops of laudanum for an adult. On ice-bags, camphor solutions, and other expedients of the kind no reliance could be placed, except in skilled hands and for selected cases. Many people poisoned themselves with camphor during a late epidemic as a precaution against cholera. Once established, and in well-marked cases of Asiatic cholera, drugs would do little to cure. The mortality of cholera all over the world and in all epidemics had defied drugs—just as severe arsenical poisoning would do—and varied according to intensity and the age and condition of the patient from 45 to 64 per cent. It was eminently a case in which prevention was far more efficacious than cure.

Thiocamph presents a ready way of using sulphur dioxide as a disinfectant—the chief obstacle to its use previously having been that, in spite of its known efficiency, it was not convenient in use. Thiocamph, however, a combination of camphor and sulphurous acid, presents the germ-destroying agent in a very concentrated and convenient form.
Notes and Queries.

Some Ways of Preventing the Spread of Syphilis.—Prophylaxis forms a sadly neglected chapter in the subject of syphilis, mainly for the reason that there has seemed to be so little to be said about it; but it is only seemingly so, for in reality there is much that might be said concerning means that could be employed to hedge about and hinder a disease so universally distributed, so generally dreaded, and at the same time so well understood in regard to the conditions under which it is acquired and spread.

Still, it is allowed to go on in its relentless course, gathering new forces as it goes, bearing down the innocent as well as the guilty, high and low alike, the virtuous not less than the vicious.

Should all our energies be strained to discover whether ten injections of an insoluble salt are superior to thirty inunctions of blue ointment, and no thought be given to the possibility that the poor devil might have been spared it all?

Have we, as supposed guardian of public health, done the square thing by the people in the matter of syphilis? Have we made the same effort to check it that has been made in respect to other contagious or infectious diseases? I think not. Syphilis has unfortunately been looked upon too much as a venereal disease, and it is largely the fault of the members of our own profession that so much popular ignorance exists regarding it. Too much can not be said against such narrow-minded utterances as the following, still occasionally heard, though fortunately much less often than in former times: Mr. Solly, a well-known surgeon, in speaking on this question at the Royal Medico-Chirurgical Society some years ago, said: "Far from considering syphilis an evil, I regard it, on the contrary, as a blessing, and believe that it was inflicted by the Almighty to act as a restraint upon the indulgence of evil passions. Could the disease be exterminated, as I hope it can not, fornication would ride rampant through the land." Such a person, in my opinion, should be made to "ride rampant through the land" on a rail. Such sentiments, I believe, are largely responsible for the great prevalence of syphilis to-day. They have prevented medical schools from giving students proper instruction in regard to this disease; they have kept closed to syphilities the doors of hospitals, not only in England, but also in this country as well; they have held back the hand of legislation, and they have accomplished no good end. Men ever have had and they ever will have illicit intercourse, and neither the dread of syphilis nor any other fear will keep them from it so long as the world endures. It is not worthy of us as men of science to be satisfied with letting matters take their course, and simply expressing regret when innocent persons suffer as the result of other's faults. We should do as much to prevent the spread of syphilis as we would in the case of leprosy, cholera, diphtheria, or variola. The physician has almost stamped out smallpox, but the great pox is left unmolested to vitiate the blood of the nation.

But you ask, How can we do any thing? we have no protecting virus as we have in vaccinia. Very true. Till now we have none such, and its practical application might be seriously questioned should one be found. Still there are many ways at our command by which syphilis might be greatly decreased. And first of all we must do away with the sentimentality which has so surrounded the disease that its name was not to be mentioned much above a whisper even in some medical circles, and not at all or even thought of in public. Yet leprosy is discussed in drawing-rooms, and forms a most stable literary topic for magazine articles. In my opinion the one is scarcely more a venereal disease than the other.

I would suggest then, as a first means of accomplishing our object, to teach the public something about the disease, its nature, its dangers, and the ways to avoid them. And to do this I would treat the subject simply in its non-venereal aspects. If necessary, we might go so far even as to change the name. If the term "syphilis" can not be freely mentioned, let us adopt a designation which may possibly better suit the condition, and at the same time better suit the public ear.
Syphilis is not such a good word that great objection ought to be raised against dropping it, except that it could not be effected in a day. No one knows positively its etymology, and for the public the good old Anglo-Saxon pox would probably be better, as the public ear is so accustomed to its combinations in smallpox and chicken-pox.

The Latin lues is not a bad term, and one now so almost wholly given up to lues venerea that the qualifying "venerea" may with propriety be left off, especially for the numerous non-venereal cases.

Popular instruction in all lines of preventive medicine can not be amiss. There is a sad lack of knowledge, even among the victims of the disease, whom one would expect to find well versed in the subject from the private instruction given them by their physicians, but such is frequently not the case.

The daily, and especially the Sunday papers do not hesitate to devote columns to the discussion of medical topics, and instruct their readers in all branches of medical science excepting syphilis, and possibly one or two other diseases, but it is simply because they have been taught by the physician to omit this subject. Once let the physician show the proper way to treat the question and the public press will quickly follow. Then there may come a time when, instead of the quack's advertisement containing the only reference to syphilis to be found in a public journal, some wholesome instruction may occasionally be given to the infected, telling them how to avoid giving the disease to others, and hints to the healthy as to how to keep free from it.

And this brings me to speak of prophylactic measure number two—more adequate instruction to medical students. The amount of time and attention given this important subject in many medical schools is simply farcical. Men are sent out into the world and expected to diagnosticate syphilis when the training the college authorities have vouchsafed them in this branch is entirely out of proportion to its importance.

I am continually seeing victims of the disease who are no less the victims of this lack of proper clinical instruction and requirements on the part of the medical school. I say it, gentlemen, in a spirit of shame rather than one of captiousness, that practitioners too often, from lack of knowledge or want of carefulness, permit patients to marry and to cohabit while sources of danger still exist, and to go about freely with contagious lesions in the mouth or throat without giving them warning of the facility with which they can transmit the disease to others. Let, then, the physician as well as the public receive better instruction in every thing pertaining to syphilis, especially in ways to avoid it, or when contracted, ways to avoid its dissemination.

Thirdly, I would advocate the enforcement of any laws now on the statutes bearing upon the question, and the enactment of such further laws as may meet the requirements to prevent syphilises with contagious lesions from propagating the disease. There are already existing municipal and State laws which would seem to cover many features of the case. Thus Section 8 of the Sanitary Code says: "No person shall carelessly or negligently do or devise or contribute to the doing of any act or thing dangerous to the life or detrimental to the health of any human being; nor shall any person knowingly do or devise or contribute to the doing of any such act or thing," etc.

Even under this section any person with such a contagious disease as syphilis who knowingly exposes another to infection would be guilty.

Again, in the State Penal Code there is a section (No. 434) entitled "Exposing Persons affected with Contagious Disease in a Public Place," which reads as follows: "A person who willfully exposes himself or another affected with any contagious or infectious disease in any public place or thoroughfare, except upon necessary removal in a manner not dangerous to the public health, is guilty of a misdemeanor."

This surely should apply to a woman who, having syphilis, exposes herself in a public place or upon the street as an article of barter; but, as it is never enforced, it can not meet the requirements.

The difficulty of securing legislation discriminating against either sex could be obviated by
enacting laws to govern prostitutes of either sex, and to apply to public men as well as to public women. (I do not mean public men in the sense in which we usually employ it.) Unfortunately, we have recently had spring up here in New York a vice known in ancient times, and one which lent not a little to the decline and fall of once powerful cities. We have borrowed it from older countries, but, like much else that is transplanted to this soil, the custom is adopted without the restraining customs of the countries from which we borrow. All goes here with a rush. Yesterday a vice known of only as it existed elsewhere is found here, and to-day it flourishes like some stinking weed, whose roots apparently sink deep into the soil, but, like the roots of the weed that springs up on a heap of dirt, they do not penetrate to the true soil and can be readily unearthed by one who has the courage to grasp the slimy stalk and pull them out.

The male prostitute just now requires considerable attention from the authorities; but all that we shall ask of them at the present is that they prevent him from disseminating syphilis in his vile trade. If to accomplish this total annihilation is found necessary, we have no objections to offer. It should be made a crime severely to be punished, for any keeper of a brothel or house of assignation for either sex to maintain upon his premises a person known to have a contagious venereal disease.

It should be a crime, attended with an equal or greater punishment, for a person having a disease known to be contagious and dangerous to another through coitus to deliberately cohabit and transmit such disease.

Have we any thing to hope from government restriction of prostitution so far as its decreasing syphilis is concerned? Just now there is considerable public interest in the question of vice in this city, and what to do with it. Whether it will result in any good to expose it, as is being done, to the innocent of the land, is very questionable. A few convictions in court may decrease the number of houses, but it will only change the quality of the prostitutes, not the number. It has been repeatedly shown that less disease exists among the women of houses than among the outside pseudo respectable working-class prostitutes and waiter-girls in so-called dives, beer saloons, etc. It is the hidden prostitution which is the most dangerous. Drive women from the house to the street, and the chances are in favor of syphilis being increased as a result.

There can be no question that strict regulation of prostitution is one of the most potent means of keeping down syphilis; still, this is not enough; attention should be paid to the frequenters of brothels as well as to the inmates. This is only feasible to a limited extent, in a way which I shall presently suggest. Since the last discussion at the Academy of Medicine on the prophylaxis of syphilis, Dr. Commenge has furnished statistics showing that among 305,799 registered prostitutes holding certificates, there were 3,12 in 1,000 cases of syphilitic affections. Among 503,712 registered prostitutes living in licensed houses, 2,70 in 1,000 cases. Among 76,740 registered prostitutes en dépôt (prison) there were 23.96 in 1,000 cases, and among 27,041 unregistered prostitutes there were 166 in 1,000 cases, all of which seems to show the necessity of vigilant supervision and strict regulation of prostitution.

Dr. Blaschko has recently published in the Deutsche Mediz.-Zeitung, No. 3, 1892, a study of venereal diseases in Berlin during the past twenty years, and shows that syphilis has been on the decrease. He first points out that the population of Berlin has increased in the following proportions: Number of inhabitants in 1860, 528,900; in 1889, 1,520,000. The number of prostitutes under supervision during this same period was, for 1860, 989, for 1889, 3,713.

Now, from the city's statistics it is shown that along with other venereal diseases syphilis has been gradually decreasing, and while in the period from 1873 to 1875 there were 11.3 cases in 1,000, from 1878 to 1883 there were only 9.8 cases in 1,000, and from 1883 to 1888 7.8 cases in 1,000.

The statistics of the Charity Hospital of Berlin also show a progressive diminution in venereal diseases in general and of syphilis in particular.

Again, the number of still-births recorded, while 46.2 in 1,000 from 1860 to 1869, had fallen to 37.7 in 1,000 in the period 1880 to
to 1889, and it is well known that syphilis is by far the most common cause of death to the fetus.

Now, while the writer estimates from his study of the question that from ten to twelve per cent of the inhabitants of Berlin are syphilitic, he still maintains that the proportion has been larger in the past thirty years. Naturally we should expect that the profession made by the authorities that their strict oversight and regulation of prostitution had been the cause of this very favorable showing would be accepted. The author of the paper takes a different stand, and attempts to show that other factors have a great deal to do with the result.

He looks upon the prostitute in this matter not as the propagator but as a receiver of the disease, and brings figures to prove that formerly the danger of these women being contaminated by men was twice as great as it now is. In 1889 fifty per cent of the prostitutes of Berlin were admitted to hospital for treatment, and he argues that, as they have connection about five hundred times a year, we can count fifty thousand acts of coitus to one hundred prostitutes; and if these only occurrence fifty contaminations, the proportion would be only one infection in each one thousand cohabitations, under police supervision.

If the women are less often infected now than formerly, it is argued that there must be less venereal disease among the men, and the fact that there is he attributes to the greater facilities now offered for proper treatment, and to a greater amount of knowledge on the part of the masses relating to the dangers of syphilis and the necessities of early and thorough treatment.

In France the visite sanitaire has received pretty thorough trial, and the Paris Academy has recently voted, almost with unanimity, after a discussion of the whole question, that the present regulations should be maintained. There appears to have been a marked decrease in venereal diseases in the French army during the past twenty years, and this is attributed to the fact that the horses frequented by the soldiers are inspected. Of course, if Dr. Parkhurst's society is going to do away wholly with vice, there will be no necessity for such regulation here; but should this prove an impossibility, then the sanitary powers should see to it that what licentiousness remains is as free as possible from disease and danger to the public. The regulation of prostitution and sanitary inspection I would then put down as one of the most important means of diminishing syphilis.

In Vienna each prostitute receives a book containing a description and photograph of herself, and a copy of the laws relating to prostitution. No one under sixteen can be registered, nor those afflicted with organic or constitutional disease. Sanitary examinations are made twice a week. All diseased women are put into the hospital, where primary syphilitic cases are quarantined for three months and kept under treatment for two years.

This plan appears to give satisfaction. I would further advocate, in the absence of such regulation, the freer admission of venereal patients into hospitals. Exten-sive as are the provisions made for this class in New York, there is room for much improvement; more wards are needed. You will probably be surprised to hear after this statement that the female venereal wards of the City Hospital are scarcely ever full, often not over half the beds being occupied, while, as is well known, the city is overrun with diseased women. The reason for this is, I believe, a proper lack of encouragement to these women to accept hospital care. There has been too much tendency at times to say to these applicants for admission, "Go, get rid of your disease where you got it." Women have more than once been turned back into the street and forced to return to a life in which they must of necessity spread disease. The city should gladly receive all applicants with contagious venereal diseases, and care for them in such a way, until the danger is over, that others similarly affected will be attracted to the hospital rather than repelled. I have seen patients who had contracted syphilis in some innocent manner refuse to stay in the wards with those whose infection was due to vice; still I do not know that we can now discriminate and furnish separate wards for the non-venereal syphilis, desirable as such a distinction might be. Much may be done to make the city's venereal service more attractive and more efficient.
And now, gentlemen, in conclusion, I will speak of a way which I think will do much to check the spread of syphilis in a direction in which, it seems to me, legislation can act. For a number of years it has been a cause of much regret to me that there was no way of restraining hospital patients from quitting the institution while still in a condition of great danger to others, but in such a perverse frame of mind that no amount of moral suasion could change their determination. Only two weeks ago a house physician at the City Hospital experienced the greatest difficulty in detaining a woman with a still ulcerating chancre of the lip; not so much on account of the public good, but so I could show her at the Saturday clinic. Last Saturday I presented a patient with an eroded chancre of the penis, who had insisted on going out a week before, when the sore appeared healed, and had returned with the epidermis rubbed off and the sore much irritated, as was strongly suspected, from coitus. I have repeatedly seen men leave the hospital with one disease still in its infectious stage, and soon return with another venereal disease superadded, giving positive proof that they had endangered others.

Now it seems to me that the action taken by the people of Massachusetts is far in advance of any thing we have done here, and is a move in a direction which should find imitators. My friend Dr. Bowen, of Boston, has kindly sent me the text of an act, approved by the legislature June 11, 1891, which was originally suggested by Dr. Fisher in a very able article on “The Necessity for Social and Statute Recognition of Syphilis” read before the Massachusetts Medical Society, May 21, 1890:

[CHAP. 420.]
AN ACT TO PROVIDE FOR THE DETENTION AND TREATMENT OF INMATES OF PENAL AND CHARITABLE INSTITUTIONS WHO ARE AFFLICTED WITH CERTAIN MALIGNANT DISEASES.

Be it enacted, etc., as follows:

SECTION 1. Any person who is confined in, or an inmate of, any State penal or charitable institution, a common jail, house of correction, or municipal or town shoshouse, who shall have the disease known as syphilis, shall at once be placed under proper medical treatment for the cure of such disease, and when in the opinion of the attending physician it is necessary for the proper treatment thereof, or that such disease is contagious, so as to be dangerous to the health and safety of other prisoners or inmates in such institution, the persons under treatment shall be isolated from such other prisoners or inmates until the contagious stage of such disease has passed, or until the time when in the opinion of the attending physician such isolation is unnecessary.

SECTION 2. When at the expiration of the sentence of any person who is confined in, or an inmate of, any of the institutions named in section one of this act, such person shall then have the disease known as syphilis in its contagious or infectious symptoms, or in the opinion of the attending physician of such institution, or of such physician as the authorities thereof may consult, would cause the discharge of such person to be dangerous to public health and safety, such person shall be placed under proper medical treatment and kept and suitably cared for, as provided in section one of this act, in the institution where he has been confined, till such time as in the opinion of the attending physician such contagious and infectious symptoms shall have disappeared, and the discharge of the patient shall not endanger the public health. The expense of his support, not exceeding three dollars and fifty cents a week, shall be paid by the city or town where he has a legal settlement, after notice to the overseers of the poor of such city or town, or, if he is a State pauper, after notice to the State Board of Lunacy and Charity of the expiration of his sentence, and of his condition.

Now, if our New York Legislature would make similar enactment, its application to the institutions at Blackwell’s Island would soon prove, it seems to me, of decided advantage. Scarcely a week passes that patients do not demand their liberty, when it seems a criminal thing to let them go at large.

“To guard is better than to heal—
The shield is nobler than the spear.”


DISINFECTION THAT DOES NOT DISINFECT.—
The value of any disinfecting process can be estimated only on the basis of experiments with the known germs of a given disease. The random directions which were vaguely followed before Koch’s accurate work involved not merely an enormous waste of labor and money, but gave no guarantee that their object was really obtained, that is to say, that the germs were killed. Since the painstaking researches by Koch and his pupils, and continued in this country by Sternberg, Prudden, and others, we know just how to destroy the germs of a given disease in the cheapest and most efficient manner. It is therefore a matter for severe censure, if vague and inefficient measures are used by parties whose business it is to know what has been done in this line.

The frequent references of the public press to fumigations with sulphur show that many
sins are yet committed in the practice of disinfection. No more flagrant instance, however, of inefficient disinfection has come to our notice than the directions issued by the New York Board of Health and reprinted without comment by the New York Medical Record.

A sulphate of iron solution in the strength of 1/2 parts to 8 of water is advised for the disinfection of cellars, yards, stables, cesspools, sewers, and so on. The accurate work above referred to has proven beyond doubt that this substance has feeble disinfecting powers at the best, and is altogether valueless in the manner recommended by the board.

A zinc solution made by dissolving 4 ounces of sulphate of zinc and 2 ounces of salt in 1 gallon of water is directed to be used for disinfecting clothing, bed linen, and so on. It has never been shown by any one that this has any disinfecting power whatsoever. In the latter part of the circular it is directed to boil clothing in this solution. While this of course is an efficient measure, what advantage is there in this fluid over boiling water? It has been shown that boiling-soda solution acts more quickly even than pure water, but no such proof has ever been given of the efficiency of the zinc solution.

Corrosive sublimate solution, 1 to 1,000, is likewise recommended. But the strong germicide properties of this substance are counterbalanced by its tendency to form precipitates with albuminoids and other organic material, and direct experimentation has shown that it is not a reliable agent for the disinfection of discharges. In reference to this as well as to the other substances mentioned in the circular we fail to find any mention of the importance of time in the process of disinfection. No one not fully familiar with disinfection methods could obtain reliable results by following the loose directions given.

The circular ends with a totally unjust praise of sulphur fumigation. Over and again it has been shown that sulphurous acid is not at all germicidal when dry, and that even when moist it permeates larger articles very imperfectly. Under the best conditions attainable on a small scale in the laboratory sulphur fumigations are unreliable, while under the conditions existing in ordinary rooms the concentration of fumes sinks speedily to such a level that the procedure is totally valueless. — Journal American Medical Association.

**Tea and Cocoa.**—The names designating the different kinds of tea depend upon the manner of curing the leaf and its relative age, and not, as popularly supposed, to difference in species. The tender, unexpanded terminal leaf forms the Flowery Pekoe, the next older leaf the Orange Pekoe, the next the Pekoe, the next the Souchong (first and second), the next Conou. The six youngest leaves when mixed together form Bohea. The manner of curing the leaves makes them into black or green tea.

Tea-brokers in India judge of the quality of teas from the appearance of the prepared leaf, the liquor obtained by infusion, and the turn-out or appearance of the leaves after infusion. The leaf should be black—grayish, with a gloss on it, not dead black—of a uniform shade, size, and form. The infusion should be strong, rasping, and pungent, and generally dark, although some choice teas yield a very pale liquor. The turn-out leaves should be uniform in color, and preferably it should be of the shade of a bright-new penny.

The Japanese prepare what they term a flat or unrolled tea. The plants are kept in darkness for a week or two before picking, thus producing a finer aroma. As high as twenty-five pickings are made in India during a season, the earlier yielding the finer grades. The India teas are usually about three times as strong as the China and Japan teas. Black tea usually contains more nitrogen-free extract than green tea prepared from the same picking, and this at the expense of the tannin, a part of which is decomposed during its fermentation. This is probably one of the reasons why in England the black tea is considered more wholesome than green tea. Leaves which have been damaged in the manufacture, or which from age and other imperfections are inferior, are faced to improve their appearance and price. The teas consumed by the Chinese and Japanese themselves are never so treated. Tea contains a much larger proportion of its peculiar alkaloid, theine, than does coffee caf-
feine, which chemically and physiologically is identically the same alkaloid.

Perhaps no food material offers conditions so favorable for profitable adulteration, and is so well utilized by the manufacturers, as all cocoa preparations. There is probably no more misleading or misabused term in the language than the term "soluble cocoa." No cocoa in the market contains a very considerable percentage of matter soluble in water, unless the material so dissolved is foreign soluble material that has been added during the process of preparation. The term seems to be used to denote a preparation that allows none of the insoluble matter to deposit from the beverage prepared from it. This purpose may be accomplished in two ways. The material may be so finely ground that a very long time will be required for its deposition, or foreign substances may be added to render the liquid of so high a specific gravity or so pasty that the insoluble matter will not be deposited. The attempt to render cocoa more easily digested by the use of alkalies is quite generally regarded as injurious, and the investigations of Stutzer show that the effect is opposite to that desired. Experience shows that the soap formed by this treatment is not agreeable to the stomach.—Dr. B. F. Davenport, Boston Med. and Surg. Jour.

A New Disinfected Chirurgical Leather or Artificial Chamois.—A very learned German chemist and naturalist has invented a new process of mineral tanning by which a beautiful chamois leather is made from sheep skins. It is tanned with a substance absolutely harmless and not decomposed nor injured by washing in soap suds. It can be soaked with any disinfectant without harm to the quality of the leather. It is claimed that bacterial life and fungoid growths are not produced by long contact of this leather with the human body surface. It is very desirable for bandages, artificial limbs, harnesses, eczema, etc. In oil and alum tanned leathers the animal fiber is still liable to decomposition. The oil or alum can be removed by washing or by extraction while the fiber remains in a more or less crude and decomposed or decomposable condition. Ordinary surgical leathers kept in contact with the body of the sick prove to be nests of bacteria. This leather does not, as (1) the animal fiber is in a neutralized condition or combination with the tanning material, and can not be extracted; (2) the tanning material combined with the fiber, being neither decomposable nor alterable at all, produces one of the most stable compounds known; (3) the tanning material is widely diffused in nature, is one of the essential elements of animal life, and not noxious like decomposed and decomposing oil or alum. The samples can hardly be distinguished from chamois. Finer sorts are produced from goat and deer skins.—Jour. Am. Med. Association.

Smoking Opium.—Opium is not considered as fit for smoking purposes until it has undergone a fermentative change which, if spontaneous, usually requires not less than ten or twelve months. The opium thus acquires a kind of bouquet more or less delicate, which is appreciated by the smoker, and in particular it has lost the rank odor and acrid taste of burnt horn which characterizes newly-made opium. Also, the kneading of the paste becomes more easy, and the pipe can be smoked without further delay.

M. Lalanne published in the Archives de Médecine Navale et Coloniale of 1891, a very complete chemical account of smoking opium, ascribing its peculiarities to fermentative changes. This led M. Calmette, of the Laboratory of Neuro-biology, at Saigen, to study the subject, for if the opium could be prepared for consumption in one to two months instead of ten to twelve, the Custom House and Régies would immediately have at their command a capital of 1,500,000 francs, that being the value of the opium undergoing spontaneous fermentation.

In the vats producing the best opium he found only aspergillus and mucous, bacteria proper being almost entirely absent. The very best old opium he found to have perfectly pure cultures of apergillus niger. He found it was very easy to raise cultures of this upon M. Kaulin's fluid, which when transplanted to opium would germinate easily and run over all its surface, forming a wrinkled velvet crust. This fungus will complete the desired fermentation in at most a month, destroying the glucose and
dextrine, and changing the tannic into gallic acid, giving it all the qualities of old opium already some years old.—Dr. B. F. Davenport, Boston Medical and Surgical Journal.

The Mattei Cure for Cancer.—The Mattei treatment of cancer was one of the most widely advertised of the numerous medical quackeries which have arisen of late years. It became so widely known in England, and so many testimonials of its wonderful cures were presented, that it received a great deal of free advertising. In response to certain representations made by Lady Paget in a monthly periodical, and by the editor of the Review of Reviews, a committee of investigation was formed in the early part of last year to inquire into the claims of the treatment. The committee consisted of Sir Morell McKenize, Mr. Lawson Tait, and Dr. G. W. Potter. It seems remarkable that a nostrum, the composition of which was kept secret, except that it was given out to be bottled electricity of different colors, supplemented by certain globules, should have been the subject of serious investigation; but as several people of influence and education had announced themselves as believers, and as the Matteists openly avowed that they courted full investigation, it appeared that to bring to light its true character would be an important public service. After the committee was ready to work, the champions of the cure began a series of tactics to prevent themselves from being proved imposters. At first, on one pretext or another, they declined to receive for treatment each case of genuine cancer as it was presented to them. After it became evident to the public that they were doing this, they agreed to take five cases of genuine cancer of the breast. These five cases were treated by the Mattei system for a year, under the observation of the committee, but, as was to be expected, they grew steadily worse. The editor of the Review of Reviews, who at the outset was a strong partisan of the method, and who appears to have acted in the capacity of an umpire, began to see that the Matteists were not gaining credit by their results. When these five cases were evidently not being cured, the Matteists requested the committee to report on old cases which they produced, claiming that they had already been entirely cured. This the committee declined to do, and the champions of the treatment began to make technical objections to different points in the investigation. The editor tried to keep them up to their part, and explained away all objections which they raised. Finally, the Matteists positively declined to continue the treatment of the cases under the observation of the committee, thus making an ignominious retreat. The chemical analysis of the electricities, the potions of the Matteists, showed no other reaction than that of plain distilled water. In spite of the exposure of the treatment of Count Mattei, this latest cure for cancer does not appear to have died entirely out.—Boston Medical and Surgical Journal.

The Chicago Medical Recorder, edited by Dr. Archibald Church, and previously published by W. T. Keener, of Chicago, is now being published by that well-known house, the M. H. Kauffman Medical Publishing Company.

SPECIAL NOTICES.

"Para[ldehyde]" possesses many of the good without the evil qualities of chloral. Used in Insomnia resulting from various causes. The objectionable taste of the chemical is, to a great extent, disguised in Robinson's Elixir Para[dehyde] (see this journal), which is an elegant preparation.

A. R. de Escarras, M. D., Paris, France, says: With S. H. Kennedy's Extract of Pinus Canadensis the results have exceeded my expectations. In three cases of metritis, accompanied by abundant and very viscous secretions, I was able to note the improvement almost at a glance, and in one case the complete cure of these affections by using the pure Pinus Canadensis on hydrophilic cotton plugs. In two cases of inveterate leukorrhoea, which resisted various well-chosen remedies, the improvement was truly marvelous; so much so, that I asked myself whether I had not fallen on a lucky combination. This time will decide. From that time I have always recommended the Pinus Canadensis in all cases where I thought its action was clearly indicated.

Attention is called to WEBBER-Pepsin S. & D. advertised in this journal. Not only has every pre-existing standard been excelled, but by the same process it is possible to reach a phenomenal digestive power. The salient features of palatability, absence of odor, its perfect solubility and permanency, at once place this product at the head of the line of Pure Pepsins. 1-6,000 is a standard that a few years ago would have seemed as ephemeral as the vagaries of the old-time alchemist. It is a fact now.
DIAGNOSIS AND TREATMENT OF DIPHTHERIA.*

BY CHAS. W. AITKIN, M. D.

I desire to be as brief as is practicable with clearness, especially so, since at every meeting of the Kentucky State Medical Society since 1866 I have heard almost universal condemnation of "lengthy reviews" and "voluminous copies of authorities." The time is short, and the more subjects clearly, practically and briefly brought before this body of practitioners of the "healing art" the more fully will we feel rewarded for the time spent in this Society's work. I want to refer hurriedly to the diagnosis of diphtheria before discussing the treatment. I do not know of any disease of which there is so much difference of opinion as to diagnosis by the physicians through the country districts. One practitioner may call every acute disease of the throat diphtheria, while another may be just the opposite, and never willing to call any thing diphtheria unless his patient is in a dying condition from that disease. It is unfortunate that we have so many extremists, as young practitioners are often led astray by hearing older doctors say "that they have not seen a genuine diphtheria for twenty years, but have had numerous cases of "ugly sore throat,"" never once diagnosing what the affection was in their cases of "ugly sore throat." In one extreme they are all diphtheria, in the other not a single case. The latter class of practitioners coincide with the laity's diagnoses of "ulcerated sore throat," "putrid sore throat," or "blisters in the throat," while in reality these conditions are either diphtheria, scarlatina, or follicular tonsillitis in nearly all cases. Of course, syphilitic or tuberculous ulcerations of the throat or aphthous pharyngitis are not to be considered as ever being confounded with diphtheria. In scarlet fever the diffused redness with the eruptive condition of the mucous membrane of the soft palate and uvula, without the diphtheritic membrane, and the difference in the early temperature are sufficient differential points for any careful observer, even before the skin eruption appears. In follicular tonsillitis the diagnosis is hardly so easy in discriminating from diphtheria.

The following table is the best differential chart I have ever seen:

<table>
<thead>
<tr>
<th>DIPHTHERIA.</th>
<th>FOLLICULAR TONSILLITIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invasion gradual, often insidious.</td>
<td>Invasion abrupt.</td>
</tr>
<tr>
<td>TEMPERATURE.</td>
<td>TEMPERATURE.</td>
</tr>
<tr>
<td>Rises gradually, may be high throughout. Course of fever irregular.</td>
<td>For first twenty-four hours 102°-106°F; lasts three days.</td>
</tr>
<tr>
<td>Often little disturbance till third day, marked asthma.</td>
<td>Most general disturbance first day, no tendency to asthena.</td>
</tr>
<tr>
<td>PULSE.</td>
<td>PULSE.</td>
</tr>
<tr>
<td>When rapid becomes feeble, may be slow and irregular.</td>
<td>Rapid and full.</td>
</tr>
<tr>
<td>Glandular swelling almost invariably present.</td>
<td>Glandular swelling usually absent.</td>
</tr>
<tr>
<td>Nasal regurgitation and bloody discharge often present.</td>
<td>Reaches height in twenty-four to thirty-six hours.</td>
</tr>
<tr>
<td>Albuminuria is present with low temperature.</td>
<td>No nasal regurgitation or bloody discharge.</td>
</tr>
<tr>
<td>Slight albuminuria only if temperature is high.</td>
<td>Slight albuminuria only if temperature is high.</td>
</tr>
<tr>
<td>Highly contagious.</td>
<td>Contagion doubtful.</td>
</tr>
<tr>
<td>Paralysis common, even after milder cases.</td>
<td>No paralytic sequela.</td>
</tr>
<tr>
<td>Prevalis epidemically.</td>
<td>Cases may have a common origin, e. g. sewer gas.</td>
</tr>
</tbody>
</table>

**EXUATION.**

Fiery blush over whole throat. Isolated spots, coalesce, gray early, greenish later. On tonsils, uvula, and pharynx. Mucous membrane bleeds readily on removal of diphtheritic membrane. Infiltrates tissue and can not be wiped off.

**EXUATION.**

Blush usually on tonsils only. Isolated yellow spots or continuous membrane. On tonsils only. Mucous membrane does not bleed on removal of the gray spots. Superficial, often can be wiped off, not adherent.
I do not refer to the microscopical examination of the membrane, simply from the fact that at the present time there are so few physicians outside of the larger cities who can in any reasonable time obtain the report of a microscopist.

The points given in diagnosis are referred to only on account of the wide difference of opinion that prevails in the rural districts as to what diphtheria is as diagnosed from tonsillitis. No doubt that many cases of diphtheria die because the physicians neglect to carefully examine the throat, or even if they should see a slight diphtheritic membrane, they act upon the advice of Oertel, who said regarding mild diphtheria "to act only when new and most alarming symptoms present themselves." Jacoby truthfully says "this is decidedly perilous," why wait for most alarming symptoms when they may be aborted.

In referring to the treatment I shall say nothing regarding prophylaxis, but only consider instances wherein the disease is developing or has fully developed. Upon examining the throat, if there should be any unnatural blush the parts should be washed hour after hour with some cleansing solution. I prefer either hydrogen peroxide in full strength or the following wash:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kali chlorat.</td>
<td>5.7.</td>
</tr>
<tr>
<td>Chloral hydrat.</td>
<td>3.9.</td>
</tr>
<tr>
<td>Bromo chloralum.</td>
<td>3.9.</td>
</tr>
<tr>
<td>Aqua destillat.</td>
<td>4.1.</td>
</tr>
</tbody>
</table>

M. ft. sol. Sig: Use as throat wash every hour.

During epidemics I have seen the preceding tonsillo-pharyngitis relieved by the wash above named, so that no membrane appeared; thus to my mind bringing about a healthy mucous membrane instead of the inflamed surface in which the Loeiller bacilli would find a fertile soil for their habitat. But when there is a distinct diphtheritic membrane, even if there be only slight patches tending to coalesce, I would not advise one to rely upon any gargle.

If we leave the throat without treatment when the membrane is forming, and notice it at intervals of six hours, it is surprising to see how rapidly the coalescing of the various membranous deposits will take place. To get an attack of diphtheria under control we should treat promptly, thoroughly, and vigorously; we must have our directions carried out to the letter between our visits. The diphtheritic membrane, not simply being a deposit but infiltrating the pharyngeal mucous membrane, gives rise to the constitutional symptoms by the absorption of its specific poison. Then if we remove this diseased membrane by the aid of any drug that will not injure the pharyngeal structures, but entirely destroy the diphtheritic membrane, we will have the drug that gets rid of the local disease which is causing the constitutional disturbance.

The "liquor ferri subsulphatis" is not a new drug, nor is it a new one in the treatment of diphtheria, yet its efficiency is not urged. Dr. Whittaker has directed its use in pharyngeal diphtheria to his classes for several years. Others recommend it, but the minutiae of its use is not generally considered among country doctors. A physician told me that he used "a fifty-per-cent solution of this preparation in the treatment of diphtheria, making an application once in twenty-four hours," he condemned it, as his cases grew worse. Another doctor used "one half teaspoonful in a glass of water to be applied several times a day as a gargle. He too thought it failed, like "all other drugs recommended." When I first began to use Monsel's solution about three years ago, I diluted it, but I never then got the effect from it that I do now. During a recent epidemic of the disease under consideration I, with my associates in practice, Drs. McDowell and Garr, have treated over one hundred and twenty cases and have had only one death. In the case that died Monsel's solution was not used; in fact the membrane was not seen in the pharynx until the larynx was involved, and owing to the extreme constitutional depression a tracheotomy was not done, and no effort was made to enter the larynx with an applicator.

While this epidemic was upon us we saw cases in every stage, from the beginning, where there was a fiery blush all over the pharynx.
with slight deposits showing a tendency to coalesce and spreading rapidly, through the stage where there was complete draping of the membrane from uvula and arches of the palate; and further on, when the whole pharynx was literally covered with the membrane, aphonia existing; then when the membrane had extended into the nasal cavities, and in three cases where it was found in the larynx and there was difficulty in both inspiration and expiration. If we saw the case early we had the throat washed heretofore referred to used every hour as gargles, or had the nurse to wash the throat as effectually as possible every hour in children too young to gargle, directing the nurse to use a swab made with absorbent cotton, or in very young children the finger, protected with absorbent cotton covered with soft muslin, was used in place of the swab; in conjunction with this Monsel's solution, full strength, was applied with the swab every six hours to all the diseased membrane. If the membranous deposit was very heavy we would apply the Monsel's efficiently every one or two hours for one and day and night, and by that time the membrane would be coming off so well that we would then use it six hours apart until every particle of the membrane was removed. Never try to tear the membrane away by force, but make the application firmly and to every diseased part. The styptic effect of the iron prevents hemorrhage, if any would occur during this gradual destruction of the membrane. After four or five applications of this drug the membrane begins to disappear, you will see the patient spit it out, and frequently large shreds will come out on the swab. The application is unpleasant and may cause the patient to vomit. After a few applications, however, the patient will become accustomed to the green-persimmon taste and will want the application made for the relief it gives.

When the nasal passages become diseased we applied the same preparation on a cotton-wrapped probe, passing it back to the pharynx and gently but thoroughly touching all the membrane in the nasal cavities. In case the nasal passages are too much occluded by the membrane to allow the probe to pass clear back without using force, have the nurse to apply it often and make the application a little further into the nasal passages each time. In this way an opening can be effected within one day's time. As soon as there is an opening through the passages application can be easily made to all diseased membrane and the cavities washed with a cleansing disinfectant solution.

Regarding the laryngeal cases, in one we tried the bichloride-of-mercury treatment and medicated steam inhalations. This is the case we lost. In the other two cases we made applications of Monsel's solution every four hours directly to the membrane with a laryngeal applicator wrapped with absorbent cotton and applied by aid of laryngoscope. In one case the false membrane in the larynx had entirely disappeared after two days, and in the other it disappeared on the third day. The intra-laryngeal applications would always provoke a paroxysm of coughing, and consequently the patient would readily expectorate all loosened membrane.

The constitutional treatment was altogether supportive. The heart was supported by digitalis and occasionally stimulated by alcoholics.

It is but just to say that during this epidemic there were fourteen deaths in and near our town from diphtheria. We are not advised as to what treatment was used in these cases, except that a tracheotomy was done in one of the fatal cases.

FLEMINGSBURG, KY.

THE CODE OF ETHICS.*

BY I. A. SHIRLEY, M. D.

Believing as I do that the present excellent Code of Medical Ethics is practically perfect, I at first thought I would have nothing to say, but in deference to the appointing power I have concluded to make an effort to render operative some hitherto dormant but all-important portions of the existing document, by briefly calling your attention to one or two of them, and again emphasizing a few superfine expressions found therein.

In the first place, a very serious impediment to the pleasure and profit of practicing our pro-

*Read at the Thirty-seventh Annual Meeting of the Kentucky State Medical Association, May, 1892.
fession is to be found in the non-uniformity, and in many instances the unscrupulousness, of medical men who willfully and maliciously undercharge. A rigid adherence to the advice of the Code when urging the adoption of an established scale of fees for every town and community can not be too strongly insisted upon, due allowance being made for the circumstances of the patient. A doctor who undercharges simply to get practice should be harshly dealt with. If the laity would only view such conduct in its proper light, namely, that a physician who underworks his fellows is charging only what he himself knows his services to be worth, this unprofessional conduct would soon cease.

In the second place, the article that so beautifully portrays to the laity their obligations to the profession must ever remain a dead letter unless some means are devised of bringing directly to their notice what is reasonably to be expected of them. Granting that there is entire unanimity of this body in regard to the necessity of the above, the query naturally suggested is, how best to accomplish it? If we could only get all the people of the State together for a few hours while McCormack, Palmer, and Wathen opened the Code to them, they could not possibly go away without learning something of the obligations of patients to physicians; or of hygiene, urethritis, or salpingo-ovaritis. But, seriously questioning the peaceable and quiet submission of the laity to such an infliction, we must search for other means. The only remaining way of meeting the issue, it seems to me, is through the public press. I would respectfully suggest that a committee be appointed by this Society to inform the public, either by means of printed instructions sent directly to them or through the newspapers. It might not be amiss to place alongside of this, in addition, more punctuality in sending around the silver wheels, that the relatives, grandmothers, and old maid aunts, especially the neighbors, friends, and non-professional nurses, be asked to let up on their ever-ready recital of what cured them of a similar malady to the one at hand, when probably theirs was only a bad cold or malaria, and we are battling with pneumonia or a typhoid.

I have long doubted the propriety of the recklessness of the existing custom of rendering gratuitous services to the ministry. The grocer, the merchant, and even the druggist charge them for their wares, while the doctor, poor soul, whose all is invested in the knowledge he may possess, pills, and instruments, gives freely of these to the dispensers of divine grace without money and without price. There can be no question of the correctness of this when the minister receives but a moderate or necessary salary; but when it comes to a hard-worked, hard-up doctor laboring day and night for a fat-salaried, well-fed, luxuriously-living, four-in-hand preacher of the gospel without remuneration, we cry aloud with the good man of old, "Consistency, thou art a jewel!" But, without recommending any change in the present state of things, we do earnestly yet respectfully request these distinguished beneficiaries of what we can do and give to hesitate longer in the future than they have in the past before indorsing every patent nostrum and traveling empiric.

We are happy to state, Mr. President, that so far as we are informed there has been no disposition on the part of this or any other State medical organization to go off after the new-fangled idea of the New York State Medical Association of several years ago. The present Code of Medical Ethics of the Kentucky State Medical Society is precisely similar to that of the American Association, which, being good enough for Gross, Flint, and Yandell, like the old-time religion that was good enough for father and good enough for mother, is also good enough for me.

Lastly, permit me to commend to every doctor in this broad Commonwealth, whether a member of this Society or not, or whatever his pathy may be, if he has a proper regard for the dignity and well-being of his profession, to rally to the help of the State Board of Health in the matter of fighting quacks and empirics. With an united effort and a forward march all along the line, under the command of Major-General McCormack, we will soon drive the entire horde beyond our borders.

WINCHESTER, KY.
Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting Sept. 2, 1892, Dr. F. C. Simpson, President, in the chair.

Dr. W. L. Rodman: This patient (presenting case in person) had a well-pronounced varicocele on the left side; was advised by his family physician to have an operation done, and was referred to me. After purging him very thoroughly for several days I sent him to the Norton Infirmary, then cut down upon the veins and removed a section about one and one half inches in length; brought the cut ends of the veins together, uniting them by means of a continuous suture of Chinese silk; then closed the external wound by a buried suture also of Chinese silk. The case has done very well from the first, none of the symptoms usually following this operation presenting themselves. Operation done two weeks ago.

I am indebted to Dr. Palmer for a valuable suggestion in connection with the case; that is, first purging and then locking the bowels up and keeping them so for at least a week after the operation. His bowels, I think, were allowed to act on the sixth day, at which time the dressings were changed for the first time. You will notice the wound is healed very nicely, leaving only a small scar. There would have been no scar at all, except for the fact that I left a small opening at the upper and lower end of the incision for the purpose of drainage; I think, however, this was hardly necessary. Another time I shall not provide for drainage, and bring the wound entirely together. I think it is advisable in these cases for the patient to wear a suspensory for at least sixty days after operation, especially in the summer time.

Dr. A. M. Cartledge: There is one feature that strikes me particularly about this case and the excellent results, and that is the suturing of the veins together in order to lift up the testicle. That is the trouble I have found with varicocele operations: the scrotum has become very much elongated, and I have never carried out the varicocele operation, taking out a piece of the scrotum, as has been suggested in practice. My results in operations for varicocele have not been as satisfactory as I would like, and I think the method employed by Dr. Rodman of suturing the veins is a very valuable additional step in the operation.

Dr. E. R. Palmer: I want to congratulate Dr. Rodman upon the excellent results following the use of iron dyed silk sutures, and their incarceration without any trouble, in place of the catgut that we have been having such bad experience with. The preparation of the patient for operation in cases of varicocele by first purging, followed by confining the bowels for eight days, is recommended by Gerster, the idea that there is danger of fecal infection, and that the suppuration which nearly always follows the operation is due to that cause. Gerster makes a very strong point of this fact, and advises that the bowels be kept closed until the external wound has healed; his suggestion of eight days is, of course, the maximum length of time.

Dr. Wm. Bailey: I would like to ask how the wound becomes infected from the bowels.

Dr. Palmer: It is a well-established clinical fact that it is impossible to prevent the distribution of poisonous material from the feces to the neighboring parts if the bowels are active.

Dr. Cartledge: I would like to ask Dr. Palmer a question. Some two weeks ago I saw a most remarkable case of varicocele; patient was a boy about seventeen years of age, who thought he had hernia. The testicle on the left side was atrophied to such an extent that you could scarcely feel it; seemed to be about the size of an ordinary bean, with an enormous varicocele on the right side. The question is, if an operation is performed on the left testicle, how much development will take place in the testicle? Also, why varicocele occurs with greater frequency on the left side.

Dr. Palmer: I think the testicle is practically gone, and you ought to have a double operation to preserve the other testicle. The most extensive case of varicocele that I have ever seen was one which came under my observation a short time since in a rape case. There was an entire disappearance of both testicles in the defendant, simply an enormous

*Stenographically reported by C. C. Mapes, Louisville, Ky.
Bag of veins on each side. The case was, on my testimony, dismissed as one of blackmail. Varicocele occurs on the left side more frequently than on the right because of the long vein on that side and the manner of its termination—purely an anatomical reason.

Dr. Cartledge: Five weeks ago to-morrow morning this young man, while engaged at some work in a saw-mill, fell across a circular saw, striking his arm, the saw extending across the posterior aspect of the elbow-joint in a transverse direction, splitting down through the olecranon process and nearly through the condyle of the humerus; the joint proper was not disturbed, at least you could see the action of both bones of the forearm. It was a typical case for ordinary resection of the joint. After, however, examining more carefully, I concluded I would drain the joint and practice a little experimental surgery on it, having such faith in thorough drainage and asepsis. I drew the triceps down, getting the proper approximation, stitching it with about eight or ten sutures to the base of the olecranon process, which had been entirely sawn through, washed it out with 1-5,000 bichloride solution and put the arm up in not quite complete extension, thinking that if ankylosis occurred I would have an arm that would have the carrying power developed in a most marked degree. Drainage-tube was removed on the tenth day; the dressing I removed on the fourteenth day—that is, the second dressing—and was surprised to find the wound nearly healed, pronation and supination perfect.

This case, I think, from a surgical standpoint is extremely interesting, and as far as I know it is entirely unique. As I understand, this class of injury is always subjected to resection.

Dr. A. M. Vance: It is certainly a very remarkable case, and the first lesson we learn from it is the power of a-epsis. This, I believe, is what saved the boy's arm, and probably his life. Ten years ago Dr. Cartledge, in ninety-nine cases out of a hundred, would not have done as he did in this case.

Pathological Specimens.

Dr. Vance: No. 1. The first specimen I exhibit is a collection of the largest rice-seed bodies that I have ever seen: they were removed from a man, a glass-worker, in Indiana, who for two years has had developing upon the dorsal surface of his right hand a large diffuse ganglion. I laid it open from the base of the first phalanx of the middle finger and half way up the forearm, turning out nearly a pint of these bodies, besides quite a quantity of milky material. It was very difficult to scrape them out of the ramifications of the different tendons. The wound healed by primary union, and the man has a very useful hand and arm.

No. 2. About the middle of July I was called to see a young lady in the morning, who gave the history that for two years she had been under treatment of a "rupture specialist," and had worn one of his trusses; that some months before I saw her he had advised removal of the truss from a right femoral hernia, as she was cured. Eight days before I saw her the hernia had come down and had become incarcerated. He and a professional friend put the patient under chloroform, and, after considerable manipulation, stated that the hernia had been reduced. The patient came home and called the family physician, who treated her one week, feeding her by the rectum. About this time her physician left the city, telling her she would get along all right. The next morning I was sent for, and found the woman, about twenty-five years of age, very hysterical, rapid pulse, and a large tumor in Scarpas's space; I advised an immediate operation, as I believed it to be an irreducible hernia. However, she told me she had had an action of the bowels each day that week. She failed to state that she had been fed by the rectum. I operated with the assistance of two trained nurses, Dr. Guest administering the chloroform. I found this portion of the ileum gangrenous and ruptured, and found probably a pint of feces in the sac when I opened it. I determined to endeavor to resect, as the old operation of an artificial anus is a thing of the past. I resected about an inch of gut, doing Wolfier's operation, sewing it together by a continuous Lembert suture, inverting the peritoneal coating so as to get perfect apposition. The young lady did well for two days, had two
evacuations of the bowels, but died at the end of sixty-two hours of septic infection from the foul condition of the wound. I feel sure that the operation of resection was a perfect success, and have been pleased to see that Dr. Ransohoff, of Cincinnati, also advocates primary resection in all cases of gangrene of the intestine from strangulated hernia.

No. 3. About eleven days ago I was called to see a gentleman, forty-two years of age, with Dr. H. M. Goodman; the history was that he had been quite constipated ten days before. He had succeeded in getting a movement of the bowel, but continued sick, with considerable pain for the first days of his illness, being particularly referable to the region of the appendix. However, when I saw the patient there was no severe pain or tenderness over that point, and no marked tympanites; but there was some swelling just below the ribs on the right side, and upon deep pressure some tenderness. I advised that operation be delayed for forty-eight hours and see what developed. On the morning of the second day thereafter I was again called; found the man with high temperature, delirious, etc. Dr. Bodine was also called in consultation at that time. We made an incision three inches long on a level with the post-peritoneal space, so that drainage could take place there; evacuated a large quantity of thick, very offensive pus, and, introducing my finger, I drew out two little casts of fecal matter about as large as a lead pencil and two inches long. I then irrigated the cavity, and, in addition to the fecal matter which came away with the irrigation water, we found this membranous-looking affair that you see here, which, upon examination, proved to be the appendix vermiformis. The case has progressed very favorably since that time; the delirium left him in a few hours, and he has been perfectly rational and free from fever. The wound now, after eleven days, has healed, and the cavity is closed up. Evidently when Dr. Goodman first saw the patient there was a circumscribed abscess around the appendix, which afterward ruptured into the post-peritoneal space while the patient was lying on his back, proving positively that the appendix sloughed off into the post-peritoneal space, a question which has been in doubt. I failed to state that since the operation and before closure of the wound a considerable quantity of material looking like coffee grounds has come away; also a piece of egg-shell about half the size of your finger-nail.

No. 4. The next specimen is a coccyx removed from a young lady, seventeen years of age, who gave the history that, six years ago, when she was eleven years old, she had a chair pulled from under her, allowing her to fall upon the floor, causing considerable pain. In the last two years only has she been seriously inconvenienced by pain and tenderness in the sacral and spinal regions. She had been treated by several physicians, and a spinal brace had been recommended by a so-called surgeon in town. Upon examination it was found that the coccyx presented at right angles toward the rectum, and was perfectly movable. It was removed quickly through a very small incision. I did it by first cutting through its junction with the sacrum, dissecting down around it without making the large opening that is ordinarily done.

No. 5. Here is a little specimen which does not amount to much as far as appearance goes, but seems to have played a very important part in the case in question. The patient was a young lady, twenty-five years of age, with history that on Friday afternoon she had an eating match with her sister to see which could get away with the greatest amount of grapes, afterward eating a musk-melon a-piece. Friday evening she was taken with great pain in the abdomen, referable particularly to the region of the umbilicus. She began vomiting about the same time, which continued until I was called to see her. On Saturday about twelve o'clock it became fecal, and continued so all day Sunday and Monday. When I saw her on Tuesday morning she was still vomiting fecal matter; the family in the mean time had been giving her considerable milk, which was mixed with the material evacuated from the stomach in a curdled state. Upon examination I found the abdomen moderately tympanitic, but no cake, however very tender and painful on pressure; temperature 100.3°F., pulse 120. I recommended an immediate lap-
anatomy, which was consented to, and with the aid of Dr. Forwood and two assistants I did the operation. When I reached the interior of the abdominal cavity I could discover no particular morbid condition; I then began to read the distended ileum. I had probably read about two thirds its length when, in trying to raise it further, something gave way. I found on this portion a marked constriction, as if a half-inch rope had been tied there for a long time. Just to the side of it was this little body, which seems to me to be a mesenteric gland; however I tied it off. It was evidently an attachment of some kind, possibly the appendix. The intestines immediately filled up below, and I milked the fluid from the distended portion of the ileum, and closed up the external wound. The patient continued to vomit for twenty-four hours after the operation, but in smaller quantities and with less frequency than before. Salines were administered by the mouth, which caused free movements of the bowels. I heard from the patient to-day; she is still alive, and prospects seem to favor complete recovery.

No. 6. This specimen was removed from a maiden lady, thirty-five years of age. She gives the history of having had painful menstruation, pain particularly severe in the region of the left ovary, for twelve years. Eight or nine weeks before she called upon me she had been attacked with nausea and vomiting, which lasted three days. She states at this time the enlargement of the abdomen commenced. When I saw her the abdomen presented the appearance and size of about a six-month's pregnancy; a curious feature of it was that the enlargement appeared to be general. If it was a tumor, the tumor was controlled by the abdominal contents, rather than the contents being controlled by the tumor, as is usually the case. It was impossible to make a diagnosis of cyst; that is, a differential diagnosis between cyst and abdominal accumulation. Dr. Bailey saw the case, also Dr. Hays. She was put upon purgatives, Rochelle salts being given in one-half-ounce doses each morning for two weeks. After I saw her I put her to bed, and she had partial suppression and retention of the urine, which required catheterization for two or three days. The only medication for two weeks was Rochelle salts, digitalis, and acetate of potassium. Two weeks ago last Tuesday, at the Norton Infirmary, I did an abdominal section exploratory; found a tumor presenting, a very peculiar feature being that it was not entirely filled with fluid. It extended out into the loins, around everywhere, among the intestines and abdominal organs, without having any definite shape. It was punctured and about a gallon of fluid removed. The tumor was easily delivered, and found to be attached to the left horn of the uterus by a very small pedicle. The tumor evidently contained the left ovary and tube; a mass of very friable material was found at the point of attachment to the uterus. Fearing further trouble from the friable condition of the pedicle, I passed the ligature around a portion of the left horn of the uterus to be sure that it would lie in good tissue. The patient made an excellent recovery, being able to leave the Infirmary on the tenth day after operation. Dr. Frank has made a microscopical section of a portion of this tumor, the specimen being at present on the slide of the microscope for your inspection, and he pronounces the trouble carcinoma; also states that the carcinoma is mixed with uterine tissue, showing that the uterus is in a carcinomatous condition. The question now presents itself as to whether it would not be good surgery to extirpate the uterus per vaginam or otherwise. The fluid contained in the cyst was the ordinary coffee-colored ovarian fluid, or such as we usually see in ovarian cysts. I will further state that the uterus appeared to be perfectly normal in shape, size, and condition, as was also the other ovary.

Dr. John Howard: I have carefully examined the specimen on slide of the microscope, and think there is no doubt but it is carcinomatous in character; uterine structure is also plainly discernible.

Dr. Cartledge: I think the case of appendicitis reported by Dr. Vance is doubly instructive. It in a practical way proves what certain men who have paid a great deal of attention to this subject in the last two or three years have been claiming; that is, that all of the trouble in the region of the cecum belongs to the appendix primarily, that the appendix is
the offending organ. Here is a case that according to its clinical aspect would be called perityphilitis, and yet the history proves that the appendix sloughed off into the post-peritoneal space, showing that while the appendix is an intra-peritoneal structure, yet under certain circumstances it might find its way back into the cellular structure. I think it is an exceedingly interesting case, and take it that it will be a long time before we will see another case that proves as much as this one.

In regard to the last case reported by Dr. Vance, it is certainly a very unusual case. Her age is against cancer, and all the history makes it puzzling. If the microscopists prove that the trouble is of a cancerous nature, I think the indications demand an immediate hysterectomy. I should prefer the vaginal hysterectomy, and think the operation might prolong the life of the patient for quite a length of time. From the examination I made of the specimen, I think there is no doubt about its being a malignant disease.

Dr. Vance: As Dr. Bailey saw this case, I would like to ask his judgment as to the propriety of an operation removing the uterus.

Dr. Bailey: The case seems to me to be in such good fix that while it might be good surgery to extirpate the uterus, still I would be disposed to wait until there was some further manifestation.

Dr. F. C. Wilson: I think it very probable that the case of appendicitis reported by Dr. Vance was caused by grape seed. I reported to this Society several years ago the case of a little girl who had appendicitis, later dying from general peritonitis, caused by swallowing blackberry seeds. In the same family there occurred about ten days ago another similar case, the result of swallowing grape seed. The patient had been ill several days before I saw him. I recognized the features of it, and told the family my suspicions. I asked Dr. Dugan to see the case, and agreed with him in advising an immediate operation. This was done, and the appendix was found to be perforated, and a collection of matter was found in the neighborhood. This was evacuated and the wound properly dressed. The patient, however, died in about thirty-six hours after the operation.

The question arises in my mind whether the result in the case reported by Dr. Vance would not show that there is probably less danger in allowing these cases to take their course, the appendix often sloughing off and making its way backward through the posterior opening, rather than opening in front through the peritoneum, as was done in the case I have mentioned. In this case the peritoneal cavity was opened, for the reason that the abscess could not be reached by any other means, and I think possibly the manipulation and exposure contributed something toward infecting the general peritoneum. It is a question whether nature's course would not be the safest of the two; that is, it might often be better to wait and let the matter gravitate backward into the post-cecal space.

Dr. J. G. Cecil: In reference to the last case reported by Dr. Vance, all authorities, I believe, are agreed that the operation for removal of cancerous womb depends upon the extent of the involvement. If the cancer has extended to the womb, I think there is very little hope in any operation, except complete removal, no matter how it is done. It seems to me the determination as to what should be done in this case would depend on two things: first, what the exact relation of this growth was to the womb, whether it were part of it or not; if it is a part of it, then evidently the womb is cancerous, and of course, if the involvement does not extend to any of the attachments or any of the surrounding organs, then hysterectomy, I think, would be the thing to be done. If, however, after this has been done, any of the structures which are adjacent to the womb have been infected by contiguity, then the operation would be of no avail. In other words, if the cancerous growth extends to structures outside of the womb and its attachments, then the operation would promise no relief, and I think the woman would in all probability live longer without operation than she would with it. It of course is a very difficult question to decide exactly where the limit of this growth is. If it is confined to the womb, then remove the womb; if it is outside of it (and apparently it was outside of it), then it seems to me that the indications are not so favorable for operation.
Dr. Vance: This body which you see here was separated by a small pedicle from the uterus; it was, however, very friable, and the uterus was lifted up when the ligature was applied, and about three fourths of an inch or more of uterine tissue was tied off. In other words, the section made to remove this growth was through uterine tissue. Dr. Frank asked me at once, when he was preparing the microscopical section, if I did not remove the uterus, as there were evidences of uterine tissue mixed with the carcinomatous cells. So I do not think there is any doubt but there are cancerous cells in the uterus proper.

Dr. Bailey: In this connection I would like to say that it was thought at the time of operation that the uterus was about the healthiest thing we had about that neighborhood. If the disease is malignant it has already invaded tissues beyond the uterus, and the removal of the uterus will not save the patient.

Dr. Turner Anderson: Concerning the last case reported by Dr. Vance, it seems to me it would be advisable to wait a little while before suggesting operation. It is true there is some risk in waiting. If the trouble recurs, involving organs other than the uterus, then of course a vaginal hysterectomy would be out of the question, and the chances of giving the woman the benefit of operation would be taken away from her. The fact that the portion of uterine tissue examined contains evidences of carcinoma is altogether in favor of vaginal hysterectomy. It is absolutely necessary that the uterus should be perfectly movable in order that vaginal hysterectomy may be performed. The liability to recurrence is very great. In one case which I saw quite recently the bladder was wounded in the operation, a vesico-vaginal fistula was left, and in less than three months this fistula became carcinomatous. The woman is still living, but has a very large and painful nodule in the bladder.

Dr. C. Skinner: In regard to the future of the last case spoken of by Dr. Vance, unhesitatingly I think immediate operation is the thing to do. I would not delay the matter, but just as soon as the patient's consent could be obtained I would go ahead and remove the uterus, and the ovary and tube on the other side. I can not agree with any one that it would be wise to await further developments; it may be too late now for operation to promise relief. I think the woman will live longer and the chances of ultimate recovery will be greater by removing the uterine at once. As to the mode of procedure, I should prefer the vaginal hysterectomy.

D. H. M. Goodman: Referring to the case of appendicitis reported by Dr. Vance, I would like to hear one or two points discussed that I do not think have been brought out. One point raised by Dr. Wilson is the question of waiting. When I was called to see the case in question, about the 11th of August, I found the man complaining of constipation, pain over the appendix, temperature 103°F, and considerable tympany. I pronounced it by the old term perityphlitis. The case progressed very well for the first four or five days, then I considered that it was becoming surgical, and advised the calling of a surgeon, and Dr. Vance was asked to see the patient about the seventh day. Two days before he saw the case the pain in the region of the appendix had suddenly ceased. He was a little in doubt as to whether it was a case of appendicitis or not, and so expressed himself; that it might be simple abscess, and advised waiting for forty-eight hours. Another point raised by Dr. Anderson is as to whether the appendix is intra- or extra-peritoneal. I remember in my dissections at the University I opened somewhere about one hundred and fifty abdomens, and think I can safely say that in no more than fifty per cent the appendix I noticed had a mesentery of its own, while in other cases the appendix was behind the peritoneum. In all cases where there is a mesentery perforation is most likely to open into the peritoneal cavity. With further reference to the case under discussion, I do not know why I insisted upon this man remaining in the dorsal position, but I did from the very start. Whether this favored the gravitation of pus into the sub-peritoneal space or not I do not know; but the question I would like to hear discussed more particularly is, whether as a general rule in cases of appendicitis it is best to operate in the first three days, and what have been the results of such treatment. Surgery, of course,
in these cases offers the only hope of relief, and I think the case in question was simply a fortunate circumstance which we did not know had taken place.

Now there are two forms of appendicitis; one which is a non-perforative variety, without suppuration, and tends to get well by resolution, and is generally recurrent; the other form perforative appendicitis, with suppuration, and often abscess or diffuse peritonitis. I had a case of this kind about seven years ago, a beautiful young lady, who had recurrent attacks of typhlitis, some fifteen or eighteen in number, and she died. In all cases of recurrent typhlitis I think the operation for removal of the appendix indicated during the intermission. In cases of suppurative typhlitis I think the time for the operation can only be determined by the individual indications of the case.

Dr. Wilson: Now this raises another question in regard to the cases that happen to recover after an attack of appendicitis, possibly without suppuration, but recurring from time to time. I remember seeing about a year ago a little boy that I felt satisfied had inflammation of the appendix, and expressed my fears to the family, but resolution seemed to take place possibly without suppuration, and I heard no more of the case until I saw an account of the little boy’s death, probably from a recurrence of the same trouble. I have seen one other case within the last year that evidently was appendicitis, which recovered by resolution, but left considerable tenderness. Now is that boy to look forward to a recurrence of these attacks, with a possibly fatal termination at some time, or is it proper, even after the case gets well, to perform an operation removing the appendix? Would that not be a justifiable operation, thus relieving the case of all future danger? Whenever this inflammation occurs once, is not the patient more liable to it afterward, so much so that the removal of the appendix would be justifiable?

Dr. H. A. Cottell: From the examination I have made of the specimen under the microscope (section of tumor, Dr. Vance’s case), I should not hesitate a moment in pronouncing it malignant growth; but when it comes to the question as to whether it is really a carcinoma, I would not like to give a positive opinion without a further and more careful examination.

Dr. Vance: I would like to answer Dr. Good- man. In the East it is recommended that whenever McBurney’s point is very well marked, and the temperature exists forty-eight hours over 102° F., the case should be operated upon.

Dr. Rodman: This little specimen was taken from a patient referred to me by one of the gentlemen present. He had several enlarged inguinal glands following the course of acute gonorrhea. The doctor thought that he would be better off by having these glands dissected out, rather than to wait for them to break down spontaneously. I made an incision, and in removing the glands I found that this one had already undergone suppuration. I consider that I was very fortunate in being able to get it out without infecting the wound. I closed the wound with a continued buried suture of Chinese silk. The wound healed by first intention, and the case was discharged on the third or fourth day after the operation. I think the patient was saved at least a month’s suffering by dissecting out these enlarged glands. I have been doing this operation now for two or three years, and every time I do it I feel better satisfied with the result.

Dr. Cartledge: My experience confirms the statements made by Dr. Rodman, that we do not remove enough of these enlarged glands, not only on the ground of saving a long convalescence, painting with iodine, etc., but they usually go on to suppuration, which can be prevented by early removal. The same thing is true of enlarged glands of the neck, whether they be tubercular, chancroidal (?), or otherwise.

Dr. Vance: My experience with enlarged glands, especially those about the neck, has been quite different. I believe when we cut down and attempt to remove the large number of glands in the neck, we do not get them all out. Manipulation seems to cultivate these glands. I had a patient not long ago with enlarged glands of the neck, and at the first operation I removed about twenty; in a short time they had reappeared, and I again operated, removing perhaps thirty more. The patient seems to be entirely well now. I have often
worked on these cases for an hour, or even an hour and a half. I remember one in particular where I dissected enlarged glands for about an hour; after two or three months they reappeared seemingly as numerous as before.

Dr. Cartledge: I believe that we all profit more by our mistakes than by our successes. In connection with the removal of enlarged glands about the neck, my early experience in the removal of these glands was similar to that related by Dr. Vance. I think if the doctor in dissecting out these enlarged glands would be sure to remove all the gland capsule, he would not have a recurrence.

Dr. Palmer: I should hesitate very much about dissecting out chancroidal glands, because of the almost certainty of infection of the wound. I have had very little trouble from enlarged glands in gonorrhea. I have dissected them out in a few instances. They were, however, adjacent to glands that had already suppurred and been opened. I would not molest the inguinal glands in syphilitic adenitis.

Dr. Cheatham: I have had in the last few months three cases of enlargement of the inferior maxillary glands, which I have treated in rather a unique way by the bougie; all three were cases of obstruction of the duct with retention of the secretion.

In some cases it is with much difficulty that the opening to Wharton's duct can be found. In one case by staining with a solution of fluorescein I was able to locate the opening. In another case the opening had to be slit with Bowman's knife, then a small Bowman's probe was passed and gradually increased in size until the duct was dilated; after this an eustachian bougie was used and passed to the gland, the secretion gradually emptied by gently milking and pressure. In those cases where there is much inflammation of the gland hot applications should be made externally. With several days' treatment by this method the glands are easily reduced. One case recently treated in this way had been advised to have an incision made externally. I am in favor of this operation for enlargement of these glands in preference to any external incision, as no scar is left.

J. E. Hayes, M. D., Secretary

THE LOUISVILLE SURGICAL SOCIETY.*
Stated Meeting, August 8, 1892, A. M. Cartledge, M. D., President, in the chair.

Dr. James Chenoweth: I have a patient to exhibit who was operated upon (resection) in January, 1891, by Mr. Mayo Robson, of Leeds, England, for tuberculous knee-joint. I thought it would be interesting to the members of the Society to see the results of this operation. The patient is five and one half years of age; had tuberculous disease of the knee joint for a year previous to the operation, and had worn splints constantly; was under treatment in the hospital most of the time. You will observe there is very little shortening of that leg, and slight motion in the joint. He still wears a felt dressing. The child is in good health at the present time.

Dr. T. P. Grant: Was the leg perfectly straight before operation?

Dr. Chenoweth: Yes.

Dr. W. C. Dugan: The question comes up here whether or not we should resect these cases in children. This question has arisen out of the fact that after the operation, improperly performed, shortening was permanent. This question has been discussed a great deal of late years, some objections being raised to the operation; but I am sure in this case there will be no shortening—that is, there will be no more than after the operation in an adult, since there was no interference with the epiphysial cartilage. Shortening, or rather a failure of the bone to grow in length, is invariably the result of injury to the epiphysial cartilage, an accident which should rarely if ever occur; so I take it that the objections are without any real foundation, and should never be arrayed against this operation, which in my judgment is a good one for certain cases. I think, however, that the leg is a little too much at an angle in this case.

Dr. W. L. Rodman: This is the patient I hoped to have had present at the last meeting of this Society, but, as stated at the time, he was ill and could not come. I wished particularly to exhibit the patient at our previous meeting as a companion case to the one Dr. Dugan presented.

*Stenographically reported by C. C. Mapes, Louisville.
A year ago last March, while working on the roof of a house, this young man fell some distance and struck his knee. After being taken home he noticed that there was a small indentation in the skin, as if it might have been made with the point of a nail, but he was satisfied that the nail had not penetrated the joint; it did not feel as if there was any thing in the joint. He told his family physician that he was quite certain it had only gone through the skin. A very severe synovitis developed two or three days after the accident, and the physician in attendance attributed it to the blow, just to the external traumatism. I was called to see the patient five or six days after the accident, and we were still able to see a little opening in the skin. I found he had temperature of 102° or 103° F.; tongue very much furred; suffering great pain; joint was very much distended; the skin over the joint was very glistening, and the patient perspiring profusely. I was satisfied that suppuration in the joint had taken place. I believed also that severe synovitis as he had at the time would not have resulted from external traumatism. I thought that the nail must have entered the joint, although the patient and his physician did not think so. As there was evidently a good deal of pus in the joint, I insisted upon doing an arthrotomy, believing this to be the best thing for him, even if there was no foreign body in the joint. I made a very free incision in the joint, and at once came in contact with a rusty nail, without head, two inches long. I then made an incision in the other side of the joint, putting in two large drainage-tubes, and irrigated the joint with chloride of zinc, 1 to 500. This was practiced daily for two weeks, and I then removed the tubes. About ten days, I think, after he was hurt erysipelas developed on his thigh, extending from the knee-joint up to the hip. You will notice a number of scars along the front and lateral aspect of the thigh, where I made incisions in a number of places and evacuated pus. The cellular tissue of the thigh was almost entirely destroyed by suppuration; many pieces several inches long were removed at different times. He had a very severe attack of erysipelas, and was laid up on that account for about two months. For the last fifteen months he has had about as good use of his leg as he ever had. The motion is not quite as good as it was six months ago, owing to his having hurt his knee recently, still you will see the motion is very good indeed. He is able to work, and has been working ever since a short time after the operation, and walks about as well as he ever did, having just as good use of his leg as before the injury.

Case No. 2. This young man probably some of you will remember was shown at a meeting of this Society some time since at the Pendennis Club. He came to me from Trimble County, Kentucky, with a badly deformed knee, the result of suppurative synovitis of the left knee-joint, which was caused by an axewound into the joint. This suppurative synovitis, which was opened at several different points by the physician in attendance, and which opened itself at several other points, left the knee badly ankylosed. The leg was so completely flexed that the calf almost touched the thigh, as you will remember, and it was really painful to see him walk. The ankylosis was bony, there being no motion in the joint at all. I put him under chloroform to test this, and there was not the slightest mobility. I sent the patient to the Norton Infirmary, and after preparing him for operation decided that the best operation would be a modification of the Rhea-Barton operation. I think this operation better than any other, although I did not do any of the regulation operations. After washing him thoroughly and keeping his leg wrapped in guaze for twenty-four hours, I made a semi-lunar incision extending from the internal to the external condyle of the femur. I removed the patella first, and then removed a wedged-shaped piece from the lower end of the femur, just above the joint; but instead of cutting only partially through the femur, as Barton did, I went all the way through. After doing this, on account of the deformity which had lasted for five years, the tendons were very much contracted, and the normal relation of the parts was so much disturbed that instead of doing subcutaneous tenotomies I made five or six by cutting from without. I preferred this to the subcutaneous method, as the normal
relations of parts were so disturbed. There was a great deal of bleeding from the sawn surfaces of the femur, and this bleeding continued to such an extent after the dressings were put on that it saturated every thing, even the plaster upon the outside. This caused me to change the dressings a little sooner than I otherwise would have done. I think they were changed on the sixth or seventh day; the temperature had not raised in the mean time to above 100° F., and that was on the second day after the operation; there was a little odor to the discharges, and I thought it safe to change the dressings at the end of a week. I found no suppuration at that time; it did, however, suppurate afterward at several superficial points—

stitch abscesses. Several of us thought at the time that perhaps the leg was not as straight as it ought to have been, but the position now, as you will see, is about right; in fact I think it is in an ideal position, fully as straight as it should be. He has not used his leg very much yet, but I think now every thing promises to be favorable. The scars which will be observed on his leg were there before the operation, as a result of the suppurative synovitis.

Dr. E. R. Palmer: Can this man walk on his leg at all?

Dr. Rodman: He has not tried it yet. I did not want him to walk on it until it had thoroughly healed. He will begin to walk very soon.

I wish to further state in regard to this case that I did not remove the articular end of the femur. Barton’s operation is to remove a wedge-shaped portion of the lower end of the femur, but he does not go into the joint. I removed the patella and a large wedge from the lower end of the femur. I think he will have as perfect a leg as we could possibly expect in a case of that kind. I kept a ten-pound weight on the leg for about six weeks, which evidently straightened it and put it in better position than it otherwise would have been.

Dr. A. M. Cartledge: In lieu of a prepared paper I wish to refer to what to many seems a hackneyed subject. Several years ago the journals and reports of medical societies teemed with the best methods of operation, and the conditions demanding operation in lacerations of the perineum. As some excuse for my remarks on this subject I will say that there has been a
temporary suspension of hostilities in this direction within the last few months. I have no original operation to offer, nor can I add any thing to what has been said of the importance of the perineal body as a means of support to the uterus, bladder, and rectum. In brief, I would say that I think we can well afford in a practical way to look upon rectocele and cystocele, when occurring before the menopause, as results of either subcutaneous or open rupture of the perineal muscles; hence the only logical operation for these conditions is a restoration of the perineal body. We are all aware that many cases of so-called endometritis, cervicitis, uterine engorgement, etc., that are daily treated in the offices of physicians by local applications are only temporarily relieved, and must be permanently cured by a restoration of the perineum.

What I desire to say in regard to the operation is this: After a careful study of the various operations, and the practical application of several of them, I am convinced that no operation so far perfectly meets the requirements in this condition. The importance of uniting the deeper structures, which was first brought out in America, is the greatest advance of any step in the operation. A combination of the ingenious method of Tate, which so thoroughly preserves all tissue in a place where this is important, with the subcutaneous union of the deep structures by the buried suture, seems to come nearer fulfilling the indications than by any other method of operation.

In recent cases, after making preliminary incisions by the Emmet and Tate methods, I have thoroughly dissected the deeper perineal structures; and while I do not claim to be able to bring in apposition individual torn muscular fibers, as some writers have, the deep muscular structures are thoroughly united by catgut, working up from the bottom and closing up to the skin margin. This is accomplished by a continuous or crossed suture. The finishing part of the operation is made by the introduction through the skin, traversing the entire pre-sutured area with silk-worm-gut sutures, these acting as a brace or support for the subcutaneous catgut suture, which I deem insufficient, as they will probably soften and give too soon.

The result of this combination is a thorough restoration of the perineum, giving for the depressed concaved appearance a full, strong, pouting perineal body.

Dr. Dugan: I would like to suggest another method of suture for laceration of the perineum: that is, use a suture with a needle attached to both ends, beginning at the bottom of this V-shaped cavity, then crossing them and securing them on the sides of the cavity, then crossing and still higher securing them, and so on, crossing and fixing them half a dozen times instead of tying them, and then finally bring them out and make one knot on the surface instead of half a dozen. I have enjoyed the paper very much indeed.

Dr. Palmer: A point in the physiological aspect of the question: The statements made bring to my mind three cases in which rupture of the perineum destroyed the capability of sexual orgasm in the women. One of these cases was operated upon very successfully by Dr. Anderson, and I learned afterward that sexual capacity was fully restored as a result of the operation.

Dr. Turner Anderson: I am obliged to Dr. Cartledge for bringing this subject before the Surgical Society. I want first to say a few words in regard to the operation as it is commonly performed. It is hardly necessary for me to say anything about the advisability of primary operation. Wherever the perineum is lacerated it is desirable that as perfect coaptation as possible should be obtained. All lacerations of the perineum should be operated upon, and the operation ought to be done as soon as possible, for the reason that if the first operation is not entirely satisfactory it will give something to build upon and be of material assistance in a subsequent operation.

I would like to have heard the essayist speak upon the subject divided; that is, complete laceration, and partial laceration. In the incomplete lacerations the operation of Tate is very satisfactory, provided we make the incision deep enough. In my operations I use silk-worm-gut as suture, the procedure being a modification of the Tate operation.

Dr. A. M. Vance: With a laceration, say two and one half inches into the bowel, I do
not see how a good result could be obtained without suturing the gut separately down to the sphincter fibers.

Dr. J. G. Cecil: The question under discussion is one of especial interest. I consider it a very important subject from a surgical standpoint, because I believe that a successful perineal operation is one of the most difficult operations in surgery. Of course it is not surrounded with the immediate dangers on the table that we encounter in many other cases; not followed by the shock and other evidences that mark greater operations, but the successful coaptation of these ruptured structures, with results which will show an improved condition, relieving the symptoms that have been prevailing since the accident, constitutes, to my mind, one of the difficult operations in surgery.

I believe that much of the discredit thrown upon Emmet's operation arises from the fact that it has been done by operators who have paid more attention to the skin than to a restoration of the ruptured muscles. Further, I think many operations for the relief of this condition have been unsuccessful because of a misconception in regard to what is called the "perineal body." Strictly speaking there is no such thing as the perineal body. It is no more nor less than a muscular structure; you can dissect that structure as much as you please, and you can never separate that body which is called the "perineal body." It is simply the junction of these muscles, and when operations have been done to restore this torn perineal body, a space is looked upon, or rather a torn space, and the conclusion is that if this torn surface is renewed the perineal body is restored; whereas, the ruptured muscles have retracted, their torn ends are not uncovered by the dissection, and consequently never re united. I think many of the illustrations or sectional views showing the perineal body are entirely erroneous.

I of course agree with what has been said as to the necessity of these operations, and the symptoms which have been outlined by the essayist are those which are common, and failure to relieve those symptoms is simply failing to get the proper conception of what is necessary in this operation.

Not long ago, in another medical society, this subject was under discussion, and I remember one speaker especially who could not understand how it was that a pessary would restore the perineal floor in such a way as to maintain a retroverted womb; he then went on to detail his own treatment or management of these cases, in which he brought out his method of replacing the womb, then packing the vaginal space posterior to the cervix, holding the womb up in that way until he could get a satisfactory pessary to hold it up. Now the operation as detailed by Dr. Cartledge takes the place exactly of the cotton and pessary, and I so pointed it out to the gentleman in question at the time.

In these cases the natural support of the womb is torn away, and the only thing is to restore it; that is, restore the ruptured muscles and connective tissue in that region. The methods of doing the operation are so many and are so complicated that I must admit I have often been confused very much by looking at the pictures in the text-books. They all suggest methods of suturing, with sketches, etc., all of which look very nicely on paper, but are difficult to understand. The description given by Dr. Cartledge seems to me to be the most satisfactory method; simply uncovering, bringing forward, and suturing the parts which have been ruptured and separated, building up the pelvic floor by continued lines of suture. In doing this operation I think cut-gut preferable, because it will be absorbed; it should be reinforced by strong sutures running through the skin.

Dr. Cartledge: I simply want to say in reply that this paper does not intend to offer an entirely original operation for the restoration of the perineum. After carefully performing the various operations employed by the different men in this affection, I have attempted to combine what I believed was the best principles of each. If I had to confine myself to the method of operation of any one man, I should give preference to that of Marcy; that is to say, the use of the buried suture alone, after thoroughly exposing the torn deeper perineal structures. However, I have thought in many cases that, owing to the softening of an-
imal suture as early as the seventh or eighth day, some additional means of support or apposition would be of advantage. To this end I supplement the buried suture of Marcy with an external silk-worm-gut suture, passing this in the usual manner, traversing the already apposed deeper structures, thus acting as a brace to the subcutaneous or buried suture of gut. Certainly my results so far have been better by this method than by the single method of Tate, the older method of Emmet, or the method of Marcy alone.

Dr. Vance: I have one case that I would like to report. I was recently called to the Sts. Mary and Elizabeth Hospital to see a man, sixty years of age, who about six or seven months ago sustained a compound comminuted fracture of the leg. Dr. Samuel attended him, and wanted to amputate the limb, but the patient would not consent to this, and he attempted conservative measures, which were carried out. The fracture united, and after the expiration of several months erysipelas developed, going from the foot to the thigh, numerous abscesses forming along the leg and thigh. The foot suffered greatly, all of the tarsus being involved. The fracture occurred about the middle of the lower third of the tibia. Amputation was advised when I saw the patient in consultation with Dr. Samuel, but he still refused. Finally he consented to amputation, and assisted by Dr. Dugan, I removed the leg about six inches below the patella. Owing to the man's advanced age and condition at the time of operation we hardly hoped to get primary union, the whole limb being very edematous and the tissues much matted together, more serum than blood exuding when the Esmarch bandage was removed. Two rubber drainage-tubes were used, which were removed on the third day. I saw the patient day before yesterday, and was very much astonished to hear that he would be out in about two weeks. I found as pretty a stump as I have ever seen, absolutely healed by first intention.

I will state that I have never before seen as perfect a result from amputation of a limb in a patient of this age, and especially when the condition of the patient at the time is considered.

Dr. Anderson: I want to ask the members of the Surgical Society one question, and that is in regard to the propriety of using drainage-tubes. It does seem to me that we have arrived at that point in which the amputation of limbs, for instance, can best be done without the use of drainage-tubes.

Dr. Palmer: I have read recently a number of articles in which the arguments presented are decidedly against the use of drainage-tubes, even in large operations.

Dr. Vance: The case reported by me was one in which drainage-tubes were necessary, owing to the large amount of water to come away.

Dr. W. C. Dugan: Since the last meeting of this Society I have had a rather peculiar experience, having seen an unusually large number of cases of appendicitis. I have seen six cases; two died, and four of the six were operated upon. One of the cases operated on died; the other one died without operation. The first patient, a lady aged about thirty-five, was in Indiana; there was a very large tumor, most prominent in the posterolateral aspect of the abdomen; temperature was low, ranging from 99° to 102° F.; patient had been treated for typhoid fever six or eight weeks. The attending physician called in aid, who made diagnosis of pyonephrosis. I was asked to see the case, and after making a careful examination we concluded that we had a case of appendicitis. We made an incision in the abdomen and found a circumscribed cavity containing several pints of very offensive pus. We operated through the loin. Patient made an uninterrupted recovery.

No. 2. The next patient, a boy about sixteen years of age, I saw in the southern part of this State. He was taken very suddenly ill with chills, and severe pain in the left side of the abdomen near the umbilicus, and other symptoms which led the attending physician to diagnose intra-peritoneal. The boy grew rapidly worse, with symptoms of colic and complete intestinal obstruction. I saw him on the fourth day. He had had stercoraceous vomiting some time, profuse cold perspiration, in fact was in collapse. We opened the abdomen and removed about a gallon of very
The state saw These After typical great pulse, seen cussing advisable, and case stooping offensive pus. When the cavity was opened the pus spurted up eighteen inches. The patient died of sepsis on the third day after operation.

No. 3. Another case I saw with Drs. D. T. Smith and Turner Anderson a few days ago; tumor plainly visible. The history of this case extended over two weeks. Patient was taken with colicky pains in region of the umbilicus. Lead colic was suspected, inasmuch as he had been painting. The patient was able to be up and around for several days after first visit by Dr. Smith, but in walking assumed a stooping position, favoring right side. Two weeks afterward he was taken worse, and Dr. Smith was again called, and for the first time found the enlargement in right side with pain accentuated there. I was then asked to see the case in consultation. Upon examination we found a tumor of considerable size in the cecal region, and extending down into the pelvis. We diagnosed appendicitis. There was one symptom I desire to call particular attention to, and that is pain in the bladder with frequent micturition. Now this is not at all uncommon, and the explanation is rational. We should not mistake this for cystitis. Dr. Anderson was asked to see the case, and he made a very careful examination, and said that he had never seen a case where he thought surgical procedure advisable, but thought this was one of the "border-line" cases, and if we decided to operate he would fully agree with us. After discussing the matter we concluded to wait until the next morning, unless something occurred in the mean time. At nine o'clock the same evening we had another consultation, and decided to send the patient to the infirmary for operation. The next morning we found the patient very much improved; pulse, which had been 130 the day before, was 92; tumor had disappeared, with the exception of a slight induration, and we were at a loss to explain it, until the mother showed us the vessel which contained about a pint of pus which patient had passed by the bowel that morning. This is a very important case indeed, and I take it we made a mistake in not operating. I believe we subjected this boy to very great danger in allowing it to run over. In this case I would not have opened the abdominal cavity until after exploring the subperitoneal space and found the pus to be intra-peritoneal. I think in all such cases, where the tumor is low down, this precaution should be observed.

No. 4. Another case I saw a few days ago with Drs. Baker and Bailey: The patient developed symptoms of appendicitis, and evidently had a typical case. I was called to consider the surgical aspect of the case with these gentlemen, that is, whether an operation should be performed or not. I found the patient in very good condition, except that there was a great deal of tympany; elevation of temperature slight; pulse nearly normal (84); and expression good. We concluded not to operate, since the tympany and other symptoms were becoming less and less marked, but I suggested that the patient be sent to the infirmary, where he could be carefully watched in anticipation of a rupture of the abscess, if one existed. The patient's family agreed to have him sent to the infirmary; but the next morning when the doctor visited him at seven o'clock, and this early visit was for the express purpose of having him taken to the infirmary, he found that he had passed a good night; tympany had almost entirely disappeared; so, being so much improved, he was not sent out to the infirmary. He got along well through that day, but some time during the night was taken suddenly very much worse, went into a collapse, and died the next morning at six o'clock.

Dr. Vance: Up to the time of our last discussion of this subject in the Surgical Society I had never seen a case of appendicitis that I was willing to operate upon, and often wondered why it was we heard of so many operations for this condition in the East, and so few in this section of the country. Since that time I have seen two, one of which I operated upon at the Children's Hospital. The other case I saw in Elizabethtown, Ky. The patient was a young man, eighteen years of age. I found him in a state of collapse, and advised operation at once; but the family refused to allow it, with the meager chances of saving the boy's life that I spoke of. These two cases of appendicitis have come under my observation within the last three weeks, and Dr. Dugan mentions
having seen six, every one of which I believe ought to have been operated upon. I believe that every time we can demonstrate the existence of pus it ought to be let out.

Dr. Anderson: Referring to the third case mentioned by Dr. Dugan, I believe this was a border-line case, and I stated at the time if the gentlemen decided to operate I would give my consent; but at the same time I remarked that I had seen such cases before, and advised delaying the operation until morning. Now I do not believe that this was a case of appendicitis at all. I think it was simply a case of rectal abscess, and believe if an operation had been performed without making a rectal examination a very serious mistake would have been made. The tumor was to my mind too low down to have been connected with the cecum.

Dr. Dugan: I assisted in an operation for this condition a day or two ago, and in this case the tumor was very low down. We were undecided at first whether it was a case of appendicitis or not. When we entered the cavity of the abscess we found a large amount of pus, and some two or more enteroliths, proving beyond all question that it was a case of appendicitis.

I can not agree with Dr. Anderson concerning the case I saw with him and Dr. Smith. The location of the tumor amounts to nothing. I have seen several cases where there was no tumor to be detected in the iliac region. The appendix is not infrequently prolapsed into the pelvis, and of course in such cases the tumor or abscess would be low down. It is my practice in all these cases to explore the rectum before completing my examination.

JAMES S. CHENOWETH,
Secretary.

CONTAGION THROUGH FLIES.—If, as it appears to have been proven by experiment, flies may be the means of disseminating anthrax, tuberculosis, and other infectious diseases, they should be objects of especial suspicion during an epidemic of cholera. They should be excluded from the house as far as possible, and all articles of food and drink should be protected by screens from contamination by them.

New York Medical Record.

Reviews and Bibliography.


Dr. DeSchunnitz has written a most acceptable hand-book and one that is sure to become popular. The reviewer has recommended it to students of medicine as one of the best they can procure. In general make-up it is much like several well-known text-books, yet in the space given to diagnosis, symptoms, and treatment more care and time seem to have been given than in foreign medical books of the same size. Several parts of it seem to be particularly commendable. The chapter on external examination of the eye is most excellent. From a careful reading of it one feels satisfied that he has been repaid for the time spent, since very little is seen that can not be found in other text-books, yet it is well put and well selected. It is well gotten up and makes an attractive appearance.

J. M. R.


The preface says: "This book is intended as a guide to the study of chemical science for the use of students of medicine. Now that chemistry, and especially organic chemistry, has become so vast a science, the student of medicine is, on the one hand, apt to find himself out of his depth in attempting the perusal of the larger hand-books on the subject; and, on the other hand, with many of the smaller works, excellent in their way, he is hampered by omission of matter essential to the successful after-study and practice of medicine. This book has therefore been written to bring together in a concise manner those portions of
chemical science that directly or indirectly bear on the study of the practice of medicine."

The first part is devoted to theoretical chemistry, which is most excellently written, and will be of great service, especially to the student.

_**J. L. H.**_

**Essentials of Diagnosis,** arranged in the Form of Questions and Answers. Prepared especially for Students of Medicine. By **SOLOMON SOLIS-COHEN,** M. D., Professor of Clinical Medicine and Applied Therapeutics in the Philadelphia Polyclinic; one of the Physicians to the Philadelphia Hospital, etc., and **AUGUSTUS A. ESINKER,** M. D., Instructor in Clinical Medicine in Jefferson Medical College and in the Philadelphia Polyclinic, etc. Price $1.50. Philadelphia: W. B. Saunders.

This excellent little book is brief, yet very accurate, and for the student fills a long-felt want. Its three hundred and fifty pages cover the subject in every respect. The fifty-five illustrations with the frontispiece add materially to the explanations, which could not otherwise be obtained. The colored plates on bacteriology especially are very striking in their accuracy. The only deflection from established custom the book shows is the phonetic spelling of certain words used in the text. Oesophagus is rendered "oesophagus," and cæcum "cecum," etc., these words not appearing in the general index.

_**J. L. H.**_

**The Principles and Practice of Medicine,** Designed for the use of Practitioners and Students of Medicine. By **WM. OSLER,** M. D., Fellow of the Royal College of Physicians, London, Professor of Medicine in the Johns Hopkins University, etc. 1079 pp. New York: D. Appleton & Co. 1892.

No other work on the practice of medicine by an American pen, except perhaps that of Flint, has met with so hearty an acceptance by the medical profession as this treatise of Dr. Osler. More than any other it utilizes the marvelous advances that have been made in the knowledge of the relations of bacteria to disease. It is written also in a happy style, the author possessing the power of smooth and flowing composition that makes easy reading, in this contrasting somewhat with Flint.

Of course it can not be long before the advance of medical science will require an imp-ovement on this work also, but until such an event occurs this work will doubtless be acco-ered a position at the very head of the column. It is in a high degree a credit to Ameri-can medical authorship.

_**D. T. S.**_

**A Text-Book of the Principles and Practice of Medicine.** For the use of Students and Practitioners. By **HENRY M. LYMAN,** A. M., M. D., Professor of Principles and Practice of Medicine in Rush Medical College, Chicago. In one very handsome octavo volume of 926 pp., with 170 illustrations. Cloth, $4.75; leather, $5.75. Philadel-phia: Lea Brothers & Co.

Professor Lyman in this work demonstrates the fact that he is a most excellent writer as well as teacher. He says he has endeavored to give the fruits of his own observation and experience, and also the substance of the latest editions of the works of Ziegler, Hallojean, Eichorst, Cornil, Babes, and the collaborators of the *Traité de Médicine.* The author's method of writing is concise and clear. The directions as to treatment are brief, but show the author's good judgment. The illustrations are numerous and excellent.

_**J. L. H.**_


This volume contains the best English medical literature for this year up to July. As a reference book it is very valuable, and is up to the usual standard.

_**J. L. H.**_

**The Diseases of the Stomach.** By **DR. C. A. EWALD,** Extraordinary Professor of Medicine at the University of Berlin, Director of Augusta Hospital, etc. Authorized Translation from the Second German edition, with Special Additions by the author. By **MORRIS MANGE,** M. D. With thirty illustrations. 481 pp. New York: D. Ap-pleton & Co. 1892.

This volume is based upon a stenographic report of a course of post-graduate lectures delivered at the University of Berlin by the author, and does not form a systematic, con-secutive, and finished text-book.

The author here gives the results of his ex-

Not many months ago the very fine edition of Pozzi's Gynecology came under review, when we took occasion to speak of it in the high terms we thought it deserved.

The present edition, though claiming to be a revision, seems to be so only in the sense that the translation is revised, the text being apparently identically that of Pozzi. The illustrations are cheap, but otherwise the style of the work is good. One merit of the publication is that it supplies in cheap form a work that is well-nigh indispensable to all gynecologists.


This is a rather non-committal and not very clear effort to refute the contention of those philosophers who insist that the relation between mind and matter is wholly inexplicable and inconceivable. The author finds in consciousness the dominating principle that produces vital manifestations. The work contains comparatively much that is obscure, and much that is irrelevant, and we are not able to perceive that it contributes anything of special value to the elucidation of the question involved.


In this the fifth edition we find many valuable changes that have been made necessary by the progress of time. The text of preceding editions has been carefully revised, and quite a number of new illustrations are found. It is a clever epitome of organic materia medica, and will prove of great value to every one interested in the subject.


This is a condensed edition from the author's great work on operative surgery. It is not intended to take the place of the former, but is simply for use in hurried reference by the busy practitioner, or for students who are preparing for examinations. The history of operative methods and all statistics of the mortality of operations are omitted in this work. Any thing coming from Mr. Treves speaks for itself, and this work is certainly the best of its kind.


As every physician of many years standing realizes the merits of this work, we call the attention of the student and young practitioner especially to it, trusting he will acquire the knowledge in a few hours of very agreeable reading that some labor for years to find out. There is every thing in a good start, and we feel sure this valuable book will put many a neophyte in the profession on the right track.

This work, the author tells us, is designed to facilitate clinical instruction, and to enable both physician and student to obtain in brief the most practical as well as scientific view of the various subjects treated of in a work on medicine. The abbreviation relates mainly to etiology and pathology, which permits a fuller consideration of diagnosis and treatment.

The style is attractive for a work so condensed, and the work will readily take a place among the best of its class. D. T. S.


A Practical Treatise on Diseases of the Skin. By John V. Shoemaker, A. M., M. D., Professor of Skin and Venereal Diseases in the Medical-echirurgical College and Hospital of Philadelphia; Physician to the Philadelphia Hospital for Diseases of the Skin, etc. Second edition, revised and enlarged, with chromogravure plates and other illustrations. New York: D. Appleton & Co. 1892.


Saunders' Pocket Medical Formulary. With an Appendix containing Tables, Formulæ and Doses for Hypodermic Medication; Poisons and their Antidotes; Diameters of the Female Pelvis and Fetal Head; Diet List for various Diseases, etc. By William M. Powell, M. D. Philadelphia: W. B. Saunders.


Manual of Skin Diseases, with special reference to Diagnosis and Treatment, for the use of Students and general Practitioners. By W. A. Hardaway, M. D., Professor of Skin Diseases in the Missouri Medical College. Philadelphia: Lea Brothers & Co.


A Text-book of the Principles and Practice of Medicine, for the use of Medical Students and Practitioners. By Henry M. Lyman, M. D. One hundred and seventy illustrations. 8vo. Philadelphia: Lea Brothers & Co.


Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

A Quack Doctor; The College of Physicians and the Sale of Practices; Mr. Hart on Cholera; Dying at Her Post; Conference of Herbalists; The Victims of Future Wars; The Egyptian Season; A Crematorium for Leeds; Interesting Gunshot Injury; Sir G. Macleod’s Successor.

A man styling himself Dr. Morors has come to grief in Ireland. He took a hall in Dublin, and was willing to accomplish most wonderful cures. The first to arrive to interview the professor were the Dublin police. It would appear from the report read out by the inspector that the “doctor” had not been appreciated in Belgium, and had been expelled therefrom, while only last year the Central Criminal Court in London had granted him nine months’ imprisonment for an assault committed upon a young lady at Newcastle, whom he had subjected to hypnotism. At the conclusion of the interview with the Dublin police, he was allowed eight hours to get out of the country, an opportunity he did not neglect. The following is the advertisement, from which it will be seen that his method of treatment was quite distinct from any thing with which the general practitioner is familiar: “I receive in my own person the poisonous products of the electricity, the sulphuric acid and the bichromate of potash, while the patient receives only its healing virtues. These acids are ‘beautified’ in my body.”

The Royal College of Physicians has recently passed a resolution declaring that it regards the sale and purchase of practices or the transfer of patients from one physician to another for a pecuniary consideration, by Fellows or members of its body, as contrary to the traditions of the College, interfering with the freedom of patients and derogatory to the position of a physician. Nothing was said with respect to the large body of medical men who hold the licentiatesship of the corporation. A discussion has accordingly arisen as to what constitutes, in strictly professional sense, a physician. The inference has been drawn that the College implies that only the Fellows and members can be thus implied.

Mr. Ernest Hart, chairman of the National Health Society, lecturing at Toynbee Hall on “The Cholera and How to Protect Ourselves from It,” insisted upon the importance of temperance and abstinence, and recommended the use of a simple acid drink, such as sulphuric acid or lemonade, in the early stages of an attack of cholera. He also referred to the necessity of keeping cisterns thoroughly clean and boiling all drinking-water.

The hospital nurse who recently died of cholera in Paris was the first to come forward when an appeal was made for volunteer nurses for the special cholera wards. She was a small, wiry woman, and looked delicate, but would not allow that she was not strong. While she was following the house physician upon his rounds, she was taken ill. At first she was bled, and then blood was transfused into her arm from the arm of a hospital attendant, but she got no better, and died. The funeral, not to frighten people, was as quiet and simple as it could be. The authorities wrote a letter to her husband to tell him that she was to be buried at the expense of the city, to have a perpetual grave, and her name written in what is known as the Golden Book at the Hotel de Ville.

At the annual conference of herbalists, held at Liverpool, the president said their wish was to protect people against quackery, and, referring to the vaccination question, he considered that, notwithstanding the Government had expended something approaching four millions upon it, vaccination had been a dismal failure.

It is thought by many of the Netly medical staff that the number of victims in future wars will constantly decrease, in spite of the great improvements which have been made in the art of killing. Wars will be exceedingly bloody, but the direct loss in killed and wounded on the field of battle, as pointed out by a series of statistical tables, diminishes from the close of the eighteenth century. This result is not only due to the exceedingly good care taken of the soldier, but also to the perfection of the arms, which are becoming less and less dangerous to life. Added to this the conquests of
antiseptic science, the increase of medical skill in general, the abundance of surgical instruments, the strict observation of hygienic laws, the promptness of medical care by which the wounded profit even on the field of battle, and the organization of the sanitary service, all tend to supplement the causes of that diminution of the ravages produced by contemporaneous wars. It is admitted on all hands that the whole merit for these benefits belongs to Prussia. To their example in the war of 1870 other countries owe their improved arrangements for attending to the wounded. During the campaign of 1870 the German Army of the North had 11,000 bearers, which number is now stated to have been increased to 15,000. Nothing is thought to be wanted, from the wagons for the wounded to the bandages and other means intended to at once relieve those injured.

Leeds has decided to send a deputation to visit Manchester and Woking to inspect the arrangements existing in those places for performing cremation. Upon the report of the deputation will depend if the town of Leeds will be provided with a crematorium.

Intending visitors to Egypt this winter will learn with pleasure that by the Brindisi route the total transit from London will be only five days, a restaurant and sleeeping-car train being provided from London. It is thought that the coming season will be the best on record, as already most of the hotels in Alexandria, Cairo, and at the Pyramids have their available accommodation booked in advance.

Surgeon-Major Hamilton records a case of gunshot fracture of the upper third of the thigh bone in which the importance of antiseptic measures in military surgery is shown to be of the greatest possible advantage. The patient, a man aged thirty-three years, was checking a target, when he was shot in the thigh by one of a party shooting on the next range with a Martini-Henry rifle at eight hundred yards range. As soon as the accident happened, a pad of dry lint was applied to the two apertures. After removal to hospital, the limb was well washed with sublimate lotion. The man was then put under chloroform, the temporary dressing removed, and careful examination made of the condition of the limb, constantly irrigating the parts with the sublimate lotion. There was a small circular invested wound four inches from the tip of the great trochanter, and a similar everted wound on the posterior and inner surface of the limb. The bullet had gone straight through the femur, fracturing and comminuting it. Both apertures were syringed with the sublimate lotion, and a wet pad of lint saturated with tincture of benzoin applied to both. A long splint (interrupted) with a seven-pound counter-extending weight applied. The dressing was removed on the ninth day; there was slight sanious discharge from the external aperture, but none on the internal. In about a month both wounds were healed. The splint was removed at the end of the sixth week; there was two inches shortening. The patient continuously but slowly gained power over the limb, eventually having a thoroughly useful limb. Dr. Hamilton points out that in the pre-antiseptic days a comminuted gunshot fracture of the upper third of the femur was synonymous with death.

Dr. Struthers who resigned his seat for the University of Aberdeen, is thought to be the most likely successor to the late Sir George Macleod in the General Medical Council. Dr. Struthers was very popular with the colleagues in the Council, who thoroughly appreciated the good work he had done on the Education Committee.

LONDON, September, 1892.

VOMITING OF PREGNANCY.—Dr. Weil proposes the use of ten drops of a twenty-per-cent solution of menthol in olive oil, to be dropped on powdered sugar, and sugar sprinkled over it. The sugar prepared in this way is to be taken whenever nausea appears. In this way a good result can be obtained in the most severe cases of apparently uncontrolled vomiting. The action of the remedy merely by suggestion, Weil maintains, can be excluded.

Fedorow-Charkou obtained a rapid and complete cure from the fluid extract of hydrastis canadensis (twenty drops four times a day). He believes that this drug reduces the blood pressure, diminishes the hyperemia of the uterus, and calms the irritated vaso-motor centers of the digestive apparatus.—Boston Medical and Surgical Journal.
Psycho-Therapeutics.—In order to discover the principle of the scientific application of psycho-therapeutics, it is very instructive to study the numerous examples of the unconscious application of them. Of this I will give a few examples.

Religious relics have had a great reputation for the cure of diseases, and Dr. Haek Tuve relates how the Rev. Fred. Wilfred Faber, who suffered from severe headaches and sickness which completely prostrated him, was instantaneously cured by the application of a relic—a piece of linen of St. Mary Magdalene of Pazzi—to his forehead. A sort of fire went through his head, through every limb down to his feet, causing him to tremble, and he cried out, "I am cured; I am quite well." In this instance an excellent and good man, having a strong religious faith in the efficacy of the relic and complete confidence that by some supernatural means this piece of linen was able to exert an influence over him, obtained instantaneous relief, when in this frame of mind he applied the relic for the purpose of removing the headache. This case may be taken as one out of innumerable examples of the power of religious faith, the most powerful of all psychological agencies in effecting "miraculous" cures.

The next example is that of magnetic healing. A very intelligent lady, a friend of mine, who believes in this agency and who lives in an atmosphere of absolute faith in the healing powers of a certain magnetic healer, went to this man when she was suffering from a gumboil which gave her great pain. This man passed his fingers on the cheek over the painful swelling and almost instantly all pain left the gum, and the swelling disappeared in the course of the next twenty-four hours. This lady had complete belief in the existence of animal magnetism, which so many of the pseudo-scientific hold, and in its mysterious healing properties; she also had perfect confidence in the healer consulted being able to remove the pain of the gumboil by these means.

The third example I shall give is that of the action of a remedy with a very great reputation but alleged to consist of nothing stronger than distilled water. A lady was suffering from cancer and was in the last stage of cachectic exhaustion, when her husband was much impressed with Mr. Stead's article on Count Mattei's cancer cure, and he determined to make a trial of it on his wife. With the first dose all racking torture that the woman suffered from disappeared, and she continued taking this remedy for the last fortnight of her life with total alleviation of pain. In this case we have a woman whose hope of recovery had been extinguished, when suddenly there appeared a heaven-sent remedy whose action was subtle and sure, and she clutched at it with a faith and a hope born of her despair. The result of its use was that, as regards her subjective feelings, she felt recovered, though the fatal disease was unaffected. A similar fact is stated to have been observed by the committee of inquiry into Count Mattei's remedies.

These three instances which I have given are very good examples, though unconsciously so, of the practical application of psycho-therapeutics, and what we must do is to see if the orthodox members of the profession may honorably and scientifically make use of this agency without also practising fraud and deception. The first feature to be noted in these three cases is that each of the agencies employed had a great reputation. Of that with the sanction of religion it is unnecessary to speak; of animal magnetism there is the semi-scientific foundation which has been given to it, as well as the undefined mysteries attaching to magnetism and electricity in the popular mind; and of Count Mattei's remedies, it is certain that they were puffed up by extravagant assertions and by reputed examples of their power, that carried conviction to most people ignorant of pathology. But the most important and uniform feature in these cases is the subjective mental state of the patients. They all had a firm belief in the agency they were using; they all had complete confidence that they were able to be cured, and they all had the expectation of being cured. Now, I ask, can not this reputation of the agent and this frame of mind in the patient be developed and made use of in a scientific manner for therapeutic purposes? This question has been solved in the affirmative. In the French town of Nancy, among the poorer classes, Professor Bernheim has acquired a reputation for the cure of disease that is almost unbounded, and these classes go to his wards in the city hospital with the utmost belief and confidence in his ability to cure them. The result is that Professor Bernheim, by merely asserting to many patients in the wide awake condition that they have no pain, removes at once any pain that they may have had by ordering them to sleep—they go off to sleep at once; and by telling them that they can not raise their arms, they are unable to do so, and so on. The same thing is observed by Dr. Bramwell, of Gooze, where he has acquired a reputation resembling Professor Bernheim's at Nancy. He demonstrated four patients to the Congress of Experimental Psychology in London, and whatever
he said to these patients in the wide-awake condition was instantly believed and took place. He produced anesthesia, total and partial, hallucinations and sleep, all in a moment, by giving a verbal or written order. In one of the women he had caused to be extracted painlessly seven teeth out of eight by the simple assertion that she would suffer no pain, and he had also by this means stopped sea-sickness. His power for the benefit and comfort of these patients in the minor and more common ailments of life by simple assertion was almost complete. The possession of this power by one or two members is of very little value to the profession as a whole, and, through it, to the general public, but I may mention here that psycho-therapeutics is unconsciously made use of by all those with reputations in our profession. It is a commonly accepted belief that a well-known consultant will often speedily cure an ailment with a drug that has proved of no benefit when prescribed by a young man with a reputation still to make. This, of course, can only be done through a psychical agency. The patient must have greater confidence in the powers of the consultant and in his ability to cure him than in the young practitioner, and a greater if not complete expectation of being cured. These feelings are no doubt enhanced by the impression of the consultant, by his crowd of patients from far and near, and by his big fees. The last item has a distinct psychical significance, for we automatically associate a value to an article in accordance with the cost or difficulty of obtaining it, and this has been true since the days of Naaman, the Syrian.

In addition to this use of psycho-therapeutics in medicine there is also no doubt a daily use made of this agency by the numerous body of family physicians, of whom we have just reason to be proud, and who have acquired the respect and confidence of their patients. A word from what is called "our own doctor" will often do more good than scientific medical treatment by a skillful stranger. Unconsciously and in these indirect ways psycho-therapeutics is probably very greatly made use of by the profession, and I think the success or otherwise of many physicians depends largely on having or not having acquired the power of giving such mental suggestion to their patients. Such a method of using this agency can, however, hardly be described as either rational or scientific.

By far the most general and scientific application of psycho-therapeutics is made by adopting the system of suggestion as practiced by Professor Bernheim. He has found that the majority of patients, even within the area of Nancy, will not accept orders or suggestions for the relief of pain, etc., in the waking condition; but he has discovered that if he first suggests to them that they are asleep, which suggestion the vast majority of his patients receive very readily, he is then able to order or suggest that their pains, etc., have gone, and they now believe him implicitly, with the result that they are so far cured. He tells the patients that if they will follow his directions he will remove their ailments. He asks them to prepare to go to sleep, and in a persuasive yet confident tone he suggests the symptoms of sleep. In a few minutes the majority of patients get into a somnolent state, not so deep as ordinary sleep, in which they answer questions, but appear to have less will power and independence than in the waking state. When in this state Professor Bernheim asserts, with some persistence if need be, that the pain or other affection has gone, and almost invariably the patient accepts his suggestions and awakes free from all symptoms. The explanation which Professor Bernheim gave me of the use of suggesting to the patient that he was asleep was that the symptoms of sleep were easy to call up, they were familiar and natural, and therefore a patient, without possessing very great confidence in the operator's powers, could, with much facility, be made to believe that sleep had come upon him. Whenever the patient has been put into this state his confidence in the operator is immediately strengthened, as he has received a demonstration of his powers, and the subsequent suggestions of the removal of the pain, etc., are now so much the more easily believed in. In addition to this in the somnolent state there exists increased suggestibility or credility and less independence of thought, which assists greatly in the giving of suggestions. It will be thus seen that this rationale is adopted to develop artificially those conditions which, as we pointed out, seemed essential in the application of psycho-therapeutics. I may add that the ability to induce this somnolent condition can be easily acquired by any one with tact. It will be noticed that I have not made use of the term "hypnotism" in my description of Professor Bernheim's procedure, for he wishes the whole process to be understood as suggestion, and his method known as "Treatment by Suggestion." Van Eeden, at the Congress in London, also pointed out that those who made use of psycho-therapeutics regretted very much its association with hypnotism, which had done it much harm.

The practical uses of suggestion for the cure of disease are innumerable. It is, in the first place, useful for the removal of all states of a painful nature, whether inflammatory, rheumatic, or neuralgic, whether functional or or-
organic. This of itself covers an immense field, and by the removal of pain the most disagreeable symptom of many ailments is cured. The sensation of pain takes place in the cerebral cortex; it is a mental state, it implies consciousness, and hence, by an alteration in our state of consciousness as is induced by psychotherapeutics, pain caused by cancerous or other organic disease can be as readily cured as functional pain. It may also be used to cure insomnia, chorea, nocturnal enuresis, nervous diarrhea, irritating coughs, sickness and want of appetite, feelings of breathlessness, and many other unpleasant psychical accompaniments of disease. The removal of these symptoms, it may be said, does not remove the real cause of the disease. This is so far true; but it is certain that the removal of anxiety and the directing away to healthier channels of the attention indirectly hasten recovery and break one of those vicious circles so common in pathology. The benefit to the patient, as regards comfort alone, is in many cases worth a very great deal, and an important feature of this treatment is that it may be combined with ordinary medicinal treatment, and may even assist drugs in their action.

The idea of making use of such procedures as I have described is new to the profession; it is altogether unconventional and different from ordinary orthodox practice, and therefore we expect it to have to fight an uphill battle till recognition takes place. I think, however, it is not worthy of a scientific body like our profession that members of it, usually ignorant of the modern practice of psycho-therapeutics, should make imputations and rash assertions of an unfavorable nature about it and thus intensify the difficulty of a fair trial. Psycho-therapeutics such as I have described can be practiced altogether in accordance with the honorable and upright sentiments of the profession, and in a truthful, rational, and scientific manner.

In conclusion, it will be noted that, in opposition to Dr. Dale’s belief that the scope of the usefulness of psycho-therapeutics is limited, I believe it may be used to alleviate or remove the symptoms of most diseases; that though the instilling of faith and hope is of value in the ultimate recovery, much more immediate and palpable benefit can also be done to the patient by removing unpleasant symptoms; and finally, whenever any physician has acquired a certain skill in the procedures, his results will be far from disappointing.—Dr. G. M. Robertson, London Lancet.

**The Dangers of Drinking-water.**—News of typhoid fever in Dublin and the large number of typhoid attacks in the Riviera among the American and European travelers, attributed chiefly to polluted drinking-water, had hardly become familiar to the profession before it heard that strenuous efforts were being made to remove the evils of Chicago drinking-water, and more recently the reports about the dangers of the drinking-water which Paris takes from the River Seine have created alarm in view of the choleraic disturbances. All of these circumstances have again directed attention to natural mineral waters of dietetic rather than medicinal character. These dietetic waters, more generally called “table waters,” if pure, are of great value as hygienic agents. Travelers are those who are oftenest exposed to the dangers of the bad drinking-water which the majority of communities furnish. Therefore they should as much as possible confine themselves to the use of well-known and admittedly pure table waters, and this is quite practicable. There is at least one such, the Apollinaris, which can be found everywhere. Where such waters can not be obtained, the ordinary drinking-water, if the least suspicion attaches to it, should be boiled before using.—N. Y. Medical Journal.

**Our August Vacation Time.**—The editor of the Maryland Medical Journal, in considering the advisability of his taking a summer’s outing, falls into a monologue like the Prince of Denmark, and murmurs: “To skip or not to skip, that is the question. Whether ’tis better in town to suffer the heat and swelter of the month of August, or to take grip in hand and migrate to some mountain clime or to some pebbled beach? To dive, to swim, to loaf, but in that loaft what images of science come forth—the clustered rods of typho-bacillus, lurking in myriads in the hotel well, borne on the seepage of some neighboring cess-pool; the organisms that thrive in dysentery; the germs of common every-day sepsis, each form more toxic than the other. Coiled on the mountain lurks the dreaded rattler, with lethal hypodermic ready; or at the seaside, in those hired bathing garments, hide the germs of grave infections—of eczema, chancreoid, and secondary—ready to fasten on the fretted skin.”

**Cervical Ribs.**—At a recent meeting of the Berlin Medical Society, Aron showed two specimens and also two patients with ribs attached to the last cervical vertebra. In the living patient the rib appeared as a small bony tumor in the supraclavicular notch. The cervical rib in this position, he said, may cause such pressure upon the nerves and vessels of the neck, that a resection is indicated.
WOMEN IN THE BRITISH MEDICAL ASSOCIATION.

"A special meeting of the British Medical Association was held in London, August 24th, to consider the question of the admission of women to the Association. Fourteen years ago, when the question was brought up, a large majority voted against the amendment. It appears that since that time the feeling in the profession has greatly changed. On the present occasion there was very little opposition, and the resolution that they be admitted was carried by a large majority."

Those of us who were on deck fourteen years ago, and again later, when the International Medical Association met in London, know how high was the ferment when the question of admitting the softer sex into these organizations came up for discussion. Since then it can not be said that the essentials of the case have changed; but our medical friends in England have come to see that women may worthily wear medical as well as any other honors, and are therefore unwilling to incur the imputation of lack of gallantry in barring the doors of her great societies against her.

That woman is capable of high education, and of doing practical work in science, and doing it well, no man with the record of her doings before him can deny. And if, when the schools are open to her, and she has duly qualified herself for medical work, medical privileges and medical honors are refused her, no one can doubt the injustice of the refusal. Nevertheless it is certain that, except in a few specialties, medicine offers no place to woman for her best work.

The rule is simple: no work befits woman if in its pursuit she is compelled to unsex herself; that she must do this in medicine admits of no argument. This being the case, the men of the profession have nothing to do but to courteously open the doors for woman, bow her in, and trust to the law of the survival of the fittest for the consequences.

MARVELOUS MEDICINE.

Among the things past finding in pathology is seemingly the cause of diabetes mellitus. For half a century or better physiologist and pathologist has cudgelled his brains to but little purpose in the matter; but with now and then an observation that hints at a rational solution of the problem. Irritation of the medulla oblongata, hepatic arterial derangement, and pancreatic disease (with suspension of function) have all had their advocates, and all except the last seem to have had their day.

This is now clothed with fresh interest by recent physiological experiments in Germany. The following, which we clip from the Boston Medical and Surgical Journal, would seem to answer the riddle; but if the reader has not great faith in the German physiologists his credulity will be severely taxed in accepting it for truth:

DIABETES FOLLOWING EXTIRPATION OF THE PANCREAS.—Minkowski has found that not only in dogs, but also in cats and pigs, a severe form of diabetes mellitus follows the entire extirpation of the pancreas. In birds this does not occur. In order further to show the special function of the pancreas, the author, after removing the pancreas from the abdominal cavity, has transplanted pieces of it under the skin of the abdomen. By so doing the appearance of the diabetes is checked, even after the entire removal of the pancreas from the abdomen; but if the transplanted pieces are subsequently removed diabetes soon appears.

DR. RUDOLPH VIRCHOW has been chosen as the new rector magnificus of the University of Berlin.
Notes and Queries.

Culture and Professional Success.—The short paper on "Culture and Professional Success," which appears in the current number of the New Review, from the pen of the late Sir Morell Mackenzie, is strongly in favor of a wide general culture as the best preparation for the more special training which every profession demands from those who aspire to enter it. The author's grounds are various, but they may be summed up under two heads: first, that such culture confers breadth and flexibility of mind and renders the acquisition of special knowledge easy; and, secondly, that it develops a knowledge of human nature, and hence assists in enabling us to treat our clients or patients, not as mere "cases," but as complex, sensitive and highly organized men and women.

This issue, ancient as it is, appears likely again to be fought out in our own day. There is a strong utilitarian wave of opinion now prevalent, and it is becoming generally assumed as an axiom that all training for a profession should be directed to the special needs and work of that profession, and that liberal studies, however pleasant and refining, must, in the stern struggle for existence, make way for subjects more practical and more immediately and obviously useful. From these causes arise the sacrifice of Greek, the limited study of Latin, the ignoring of English literature, and, on the other hand, the concentration of attention upon physical and biological science. We are no advocates of any abortive and anachronistic attempt to turn medical students into classical or literary pedants as a preparation for the work of the hospital ward or the consulting room; but we would remind those most imbued with the spirit of the new era that the preparation of the intellect for the reception of knowledge is an object hardly less great and urgent than the character of the knowledge which is to be imparted. We all admit that some such preparation is indispensable. The greatest enthusiast for science will hardly affirm that chemistry, physics, and biology afford a sufficient basis for an all-round intellectual development. They are no doubt most important, but their successful prosecution would still leave the student ignorant of the history of his race and of many of the highest and noblest achievements of the human intellect.

In medical education we desire, with as little waste of time as possible, to bring trained and disciplined minds to bear on the problems of disease, and the question is in what manner this can be best effected. Many will accept this putting of the case and will ask with decision how the Differential Calculus, the subtleties of Greek grammar, or the Categories of Kant are likely to be helpful. A sneer of this kind, however rhetorically effective, is not conclusive. The medical student needs strength and grasp of mind; the capacity to note resemblances and differences; the power of determining what amount of evidence is sufficient to warrant a given conclusion; some capacity of reading character, so as to estimate correctly a patient's statements and to eliminate the personal equation. He needs to be cautioned against haste, inaccuracy, prejudice, and preconceived opinions, fallacious reasoning, confused or contradictory ideas, want of tact, and many other things. These are formidable requirements, and the question is whether they can be met by any process less tedious and troublesome than that involved in a good preliminary education. The great danger of medical education at the present day is that raw youths with wholly unformed minds and destitute of any correct ideas regarding observation, evidence and reasoning, should be set to dissect snails, mussels, and frogs, to look down microscopes, and to handle test-tubes, and come to imagine that little else is necessary. If such methods should extensively prevail, we believe the results would be quite as disastrous as those which flow from an excessive devotion to the Greek digamma or the higher geometry. Cardinal Newman says in one of his works that we have ample proof that the old methods of instruction by means of the classical languages and mathematical studies are capable of producing flexibility and grasp of mind, and that we have no proof that any other methods are adequate for this purpose.

Apart from purely professional work, we have to consider how best we can promote that
mental attitude which helps the practitioner to understand his patient not only as the subject of disease but as a human being. In the article alluded to above it is justly observed that professional success depends not only upon the power of giving good advice, but upon the capacity of so influencing our patients that they will be inclined to follow that advice when given.

Many of the greatest practitioners of medicine have a magnetic influence in this way; but for those not thus exceptionally endowed there is no means of acquiring this power so likely to be successful as a wide knowledge of different subjects, in other words, a good all-round culture. This should enable its possessor to understand different types of mind, to enter into their point of view, and to sympathize with their various difficulties and apprehensions.

We may ask, finally, why so deep a prejudice should exist against the higher culture as a preparation for the professions. We believe the answer given in the paper in the New Review is the correct one, viz., that in some cases liberal culture disinclines the mind to devote itself heartily to what are often the dreary details of technical professional knowledge. We are reminded that Sir Benjamin Brodie acknowledged that, nourished as he had been on classical literature, he had great difficulty in bending his mind to the dry details of anatomy. His subsequent greatness is the answer to those who maintain that literary culture is a hindrance to scientific eminence and professional success.—London Lancet.

AMERICAN AND ENGLISH METHODS OF PREVENTING CHOLERA.—"The quarantine war at Fire Island continues, hitherto happily without bloodshed." Such is the telegraphic communication with which the cholera intelligence in the public press opened up the 14th inst. Happily, too, for us, the quarantine war in question is going on in the United States of America and not in the United Kingdom of Great Britain and Ireland. It has for many years past been one of the leading contentions of our public health authorities that it was necessary to an efficient sanitary administration that the people should be educated, by the aid of sound sanitary laws and regulations, to such a standard that they themselves would appreciate the importance of maintaining and enforcing those laws and regulations. And we have always contended that teaching a people to rely on quarantine laws had again and again led those very people not to trust in public health measures, but to rely on the stringency of their quarantine laws for their protection. It is also a matter of common report that governments trusting in such laws have not dared, in the face of the public opinion which they had educated up to the required standard, to do otherwise than enforce their quarantine laws by the aid of the sword, bullet, and bayonet, regardless of the cruelties which the system involved. But, notwithstanding all this, we were hardly prepared for the scenes with which American quarantine against cholera has been accompanied at Fire Island within the New York jurisdiction. American sanitarians have, we know, contended for a modified quarantine system, and we would not pretend for one moment that a system such as we have adopted for our island, with its incessant communications by sea with neighboring countries, is one that is adapted, without notification, to distant ports and countries such as those of the western hemisphere. It is for American experts to advise their Government and countrymen as to what are the measures of prevention against cholera which are best adapted, under their own circumstances of public health, commerce, etc., to cope with the disease. But we are none the less convinced that the more a nation is educated to rely on quarantine, the more it becomes demoralized from a public health point of view. In the eastern hemisphere the quarantining nations are the backward nations whose populations have suffered most from preventable diseases, including cholera; and both the folly of their practices and the amount of their preventable disease are largely increased by the extent to which quarantine restrictions have been held up to their people as things to be trusted in. The United States have made vast progress in public health, some of their advisers are men of the highest eminence, and it may be that some system of quarantine is that which will best meet the possible importa-
tion and diffusion of cholera in the case of their country. But, however this may be, its educational effect is of the worst. If healthy people are, in the eyes of the government, such a danger to a community because they come from an infected port or because cholera has occurred on board the ships in which they travel, that they must be kept away for ten or twenty days, although this may involve the greatest cruelties, indecencies and danger of death, then why complain of the action of people such as those who, in the Fire Island case, armed themselves with clubs, pistols, boat-hooks, and rifles, and were deaf to the entreaties, tears, and pleadings of helpless women and children who, though healthy, had been labeled by the quarantine system as dangerous?

In this country we have been trying hard to educate the nation to a higher standard, namely, to understand that quarantine can not be trusted to keep out cholera, but that purity of the water consumed, of the air breathed, and of the soil can and do prevent the extension of the disease. But, as we pointed out last week, even some of our sanitary authorities are clamoring for quarantine, and are thus trying to lead the public back to experiences which savor rather of the middle ages than of the Victorian era of public health administration. They may plead that Englishmen may be trusted not to behave as did the mob in the Fire Island case. But here, we fear, they are wrong. Prejudice, ignorance, and fear have led to almost precisely the same results in our own country, and the moment we revert to quarantine at that moment will there be endless attempts to get ashore in violation of the quarantine regulations rather than remain on board an infected vessel, and with these attempts will come determined and violent efforts to frustrate them; and not only so, but such efforts would have some justification, for they would be in the direction indicated by the government which had authorized a reversion to the ancient, useless, and cruel system known as "quarantine." We would urge people who are thus pressing the Government to read again the intelligence from Fire Island, and also note that the practical outcome of the New York quarantine system is an announcement on the authority of the Board of Health that five cases of genuine Asiatic cholera have already occurred in New York.—Ibid.

Sterilized Milk for the Poor.—At this season of the year there is always more than usual interest taken in all matters pertaining to milk and to infant-feeding in general. Last summer one or two of the larger dispensaries in this city made an attempt to furnish sterilized milk to the poor, and, while there were many obstacles in the way of the success of this movement, the same institutions have felt sufficiently encouraged with their first experiment to warrant them in repeating it this season. On first thought this would seem to be a very important and practical charity, and one quite easy to carry out, but experience has shown that the bright dreams of the theorist have not been fully realized. It is undoubtedly a great blessing to the poor in our crowded down-town tenements to be able to obtain even pure unsterilized milk at a reasonable price, for a large experience among these people has taught the writer that it is well-nigh impossible in many of these districts to obtain good, reliable milk at any price, and hence those children who are unfortunate enough to be deprived of their precious birthright—breast-milk—are almost universally fed on canned condensed milk.

The sterilized milk furnished by the dispensaries is dispensed in small bottles, one being intended for each feeding. Though the milk may be properly sterilized in the first instance, there are many sources of contamination difficult to avoid. Thus, if dispensed with the cotton plugs in the mouths of the bottles, it is more than probable that the people will tilt the bottles on their way home, and so wet the cotton and perhaps even spill the milk. It may be argued that this is carelessness, and is avoidable, but it must be remembered that the beneficiaries of this charity are densely ignorant, frequently both careless and lazy, and that even with the best intentions it is very easy to tip the bottles and contaminate the milk when one has to carry a number of bottles of milk, perhaps one or two bottles of medicine, and a sick and fretful baby in the bargain. On the other hand, if the cotton plugs
are removed and corks substituted for them just before the milk is dispensed, there is again a likelihood of infecting the milk. It is not difficult, then, to understand that it is easy in actual practice to neutralize all the good supposed to be derived from the sterilizing process.

Speaking of the quality of the milk, I am reminded of an interesting paper read before the Bellevue Hospital Alumni Association by Dr. John E. Allen, in which he described the methods of inspection and analysis in vogue in this city. The districts are frequently changed, as are also the inspectors, and a study of the reports of this department for the past few years shows that, as a result of the rigid inspection and enforcement of the law, there has been a constant and decided decrease in the number of arrests made necessary, and in the quantity of milk destroyed each year, as compared with the total number of inspections. As the law requires the presence of a witness when a sample of milk is taken for analysis, or when a lot of milk is destroyed, the inspector is accompanied by a sanitary officer. When the milk is confiscated and destroyed, a sealed sample is given to the owner and one sent to the chemist of the board for examination. If any physician in the city has reason to suspect the quality of any milk-supply, he has only to report his suspicion to the Board of Health, when a thorough inspection will be made, extending even back to the dairy, and a report sent to the physician.—Medical News.

CREMATION OF BODIES DEAD WITH CHOLERA.—Dr. A. S. Ashmead, late foreign medical director of the Tokio Hospital, Japan, says there are a few things which it would be wise for us to consent to learn from Japan, and one of them is the cremation of all persons dead with cholera. Exclusive of the private establishments of each Buddhist burial-place, there are in the city of Tokio six public crematories, each large enough to burn twenty-five bodies at a time. It is to be regretted that cremation has not with us that religious origin which first recommended it to the Japanese. Reason and good sense have never proved such strong foundations, otherwise the advisability of the cremation of cholera victims would have occurred to us long ago. In 1866, when a few cholera immigrants had been buried on Ward's Island, N. Y., an epidemic started almost immediately in the part of the city nearest to that burial ground.—Boston Med. and Surg. Jour.

A BOOM IN LYSOl.—The chief sanitary board of Austria has published, apropos of cholera, a statement regarding the value of some new disinfectants, in which it draws special attention to lysol. It says that the drug is speedily destructive to the comma bacillus, but is much less poisonous to man than is carbolic acid. A further advantage which lysol possesses over carbolic acid as a disinfectant of the hands, linen, etc., is that a solution of it renders the skin smooth instead of rough.—Medical Record.

SPECIAL NOTICE.

GONORRHEA.—In compliance with a request from a medical brother, I send you the formula I use in treating gonorrhea in the male. But before proceeding with my favorite way of treating this disorder, I will give you a formula which I have used many times with success:

R. Bals. Copaiba.........................1 ounce.
Tinct. Cubebæ..........................4 ounce.
Salol....................................84 grains.
Ol. Gauhtheriae.........................1 dram.
Syr. Acaciae—q. s. ad...........3 ounces.

M. Sig.: Teaspoonful two hours after meals, three times a day. To be well shaken.

The above formula is the best I ever used, until I devised the following treatment:

R. Lithiated Hydrangea (Lambert) 4 ounces.

Sig.: Take two teaspooonsful in water, with six drops of oil of gauhtheria, three times a day, two hours after meals.

Zinc. Sulpho-Carbo late................40 grains.
Peroxide Hydrogen.....................41 grains.
Aqua Dest. q. s. ad..................4 ounces.

M. Sig.: Use syringeful, after urinating, three times a day.

In writing for the above I write three prescriptions, one for Lithiated Hydrangea, one for oil gauhtheria, and one for injection.

I always instruct my patient to exercise great care, when using the syringe, to press the urethra with thumb and forefinger to prevent the fluid from being thrown too far back. A little caution right here will prevent the intense irritation that so commonly follows the use of the syringe, in causing irritation at the neck of the bladder.

In the Hydrangea we have, par excellence, the remedy for painful urinating, combined with the Lithium, which is as pleasant a diuretic as is needed. The oil of gauhtheria can well serve the same purpose as the balsam of copaiba, while the injection will quickly exterminate the exciting cause.—B. Frank Price, M. D. (Braddock, Pa.), in Medical Brief.
THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNA."


Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the platitude possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—Ruskin.

Original Articles.

MYXOMA OF THE NOSE AND FIBRO-MYXOMA OF THE NASO-PHARYNX.

BY S. G. DAIBNEY, M. D.
Clinical Lecturer on Diseases of the Eye, Ear, Nose, and Throat in Hospital College of Medicine, Louisville, Ky.

Myxomata are much the most frequent of nasal tumors. Zuckerkandl is said to have found one polyp in every eight or nine autopsies, but from his own description it is evident that he included many cases of hypertrophy and of other growths in his list of polyps. Bosworth in private practice has found one polyp to every eleven cases of ordinary catarrhal inflammation of the nose. In my own experience they have certainly not formed so large a proportion, probably because of the wide prevalence of catarrhal inflammation in this region. Myxomata may occur at any age, but are much more frequent after sixteen. As regards their cause nothing definite is known, but it is a significant fact that the favorite site for their origin is in the mucous membrane covering and beneath the middle turbinate bone.

McBride and Bosworth both find the exciting cause of nasal myxomato a "water soaked" condition of the mucous membrane, a condition especially prone to occur in the area just named, partly from the structure of the mucous membrane here, and partly from the narrow space between the middle turbinated and the unformicon process, which may easily be closed by a little swelling, and thus the bony ridges brought into contact. It is a little strange that, recognizing this state of the mucous membrane as the underlying cause, Bosworth nevertheless advises no treatment further than the removal of the growth.

Some years ago Woakes advanced the view that a necrosing ethmoiditis was the exciting cause of nasal polyps. This opinion is not generally held by other surgeons, and has been subjected to much criticism. Lennox Browne, Walham, and Hill, at a recent meeting of the British Medical Association, asserted that to find ethmoidal disease at all in this connection is very unusual, while McKenzie, Bosworth, and others insist that Woakes has confounded cause and effect, and that ethmoidal necrosis, when it does exist, is the consequence of the nasal polyp, not the cause. This opinion is substantiated by the fact that bone disease is not common where there is but a single polyp, but is to be found where there are a great many, and especially after they have existed for some time.

The most exact investigations into the situation of nasal myxomata have been made by Zuckerkandl. In thirty-three autopsies he found the polyp to originate from the lips of the hiatus semi-lunarisis fifteen times, from the edge of the middle turbinate four times, from the subjacent bony eminences six times, and from the septum three times. The growths on the septum were all sessile, and probably were hypertrophies rather than true polyps, since by other observers the septum has only very rarely been found to be their site, McKenzie stating that the cases reported by Bryant, Leriche, Wagner, and Hartman (each one case) were the only authentic instances within his knowledge. The origin of at least two thirds of nasal polyps at the edge of or beneath the middle turbinate bone has important practical applications in their treatment, since, as an inspection of this region on the dried bone
will show, it must often be impossible to reach the base of the polyps without removing a piece of the middle turbinate.

The diagnosis of myxomata is usually easy; their color, consistence, mobility, location, and painlessness distinguish them from other growths. The greatest liability to error in this respect lies in overlooking small polyps which are deep situated beneath the middle turbinate. In every suspicious case this situation should be thoroughly examined, a pledget of cotton soaked in a four- to ten-percent solution of cocaine being first packed in under the bone to produce anesthesia and to contract erectile tissue.

Where there are several polyps the mucous membrane covering the middle turbinate is sometimes found to be in a state of myxomatous degeneration, with irregular polypoid hypertrophies growing from its side and edge. In quite a small proportion of cases the cells of the ethmoid are continued into the middle turbinate, and its anterior end bulges toward the septum. On removing the shell of bone covering this prominence the cavity will be found occupied by one or more polyps having the appearance of a cyst. I have seen two such cases in my own practice.

The symptoms produced by nasal polyps vary in different cases. Sneezing, which Bosworth has found almost always present and very persistent has in my patients, been often absent. A sense of pressure about the bridge of the nose is usually complained of, and when the polyp is large there is obstruction to nasal respiration on that side. Sometimes the only symptoms mentioned by the patient are reflex ones, referring to other organs. Recently a lady consulted me on account of overflow of tears and "weakness" of one eye. She made no mention of nasal disturbance and was greatly surprised when I removed several polyps from the corresponding side of the nose. The epiphora caused by nasal polyps is usually attributed to pressure on the nasal duct; but, bearing in mind the soft consistence of the tumor and the bony walls of the canal, it seems to me much more probable that it is due to reflex lacrimation.

Bosworth has found an astonishingly large proportion of polyp cases in asthmatic patients. Thus, in thirty-four cases of hay-fever asthma there were nine cases of polyps, while of forty-six cases of perennial asthma eighteen were the subjects of nasal polyps. Not less remarkable are the results of treatment in Dr. Bosworth's hands. Of five cases of hay-fever asthma, three were cured and two improved by removing the polyp and straightening the septum, while, of eighteen cases of perennial asthma, fifteen were cured and three improved by simply snaring away the polyp. The experience of other specialists hardly agrees with that of Bosworth, either in the large proportion of polyp cases among sufferers from asthma, nor in the very favorable results obtained by removing the polyp when present. I know of no other statistics on the subject, but the general opinion of writers is that nasal obstruction is far from being always present in cases of asthma, and that when it exists its removal more often alleviates than cures the disease. McBride, however, relates a case in which the removal of a polyp too small to cause obstruction was followed by immediate and great relief to asthma.

This reflex influence of small growths is now well established and shows the fallacy of the opinion expressed by McKenzie, that polyps requiring treatment are generally between a currant and a grape in size. Various other symptoms have been attributed to nasal polyps, serious organic disease of the eyes, epilepsy, and megrim, but no such cases have come into my own experience. The sense of smell, and consequently of taste, is often impaired, and where mouth-breathing is necessitated for a prolonged time its injurious effects on the throat and lower air-passages are likely to ensue. Tinnitus aurium and deafness are often produced by nasal myxomata, but are much more commonly associated with post-nasal polyps, to be presently described.

The treatment of nasal myxoma consists in the removal of the growth and appropriate applications to prevent its recurrence. The method of operating advised by some, even of the most recent, text-books on general surgery seems strangely out of place in this day of perfected examination and surgical technique.
Thus, a voluminous work which has recently appeared recommends that the patient should be in the recumbent position, and that the surgeon introducing the forceps should grasp the growth and twist off with it a portion of the middle turbinate, and that a general anesthetic should usually be given. Not a word is said as to the use of the nasal speculum and reflected light to illuminate the nares and accurately locate the polyp. But only by such means is a thorough diagnosis possible. The polyp being seen, a four-per-cent (or stronger) solution of cocaine should be applied around and on it, either as a spray, or, as I prefer, soaked in a pledget of absorbent cotton. Used in this way we are less likely to produce constitutional symptoms or to have the cocaine get into the naso-pharynx, with the unpleasant sensations which that causes. Local anesthesia and contraction of the blood-vessels having been thus induced, a snare should be introduced, the wire loop worked as well as possible around the pedicle of the polyp, and the growth removed. Operating in this way, there is usually very little pain and very little hemorrhage, often none. For anterior growths, such as we are now describing, I prefer the real snare of McKenzie and No. 5 piano wire. The different forms of snare, however, are numerous, and most of them are good. So far the line of treatment is well defined, but as to what further measures are necessary authorities do not always agree. At the last meeting of the American Laryngological Association the radical treatment of nasal myxomata was the subject of considerable discussion, Sajous, Roe, Jarvis, Rice, and Mulhall agreeing that in many cases a portion of the middle turbinate must be removed in order to get thoroughly to the point of attachment of the next of polyps beneath it. Sajous operates with Rongeur forceps and applies electro-cautery, Roe uses the saw of his own device, Jarvis and Mulhall use Jarvis’ snare and small searching forceps. The operator, if possible, should have each of these instruments at hand, as each will sometimes be found the best. For removing the edge of the middle turbinate, I use generally the reel snare. When the edge of the bone can not be caught in this way the Rongeur forceps are used with advantage. I have found this little instrument so useful in various nasal operations that I wonder now how I did without it. Since severe reaction, and it is said even fatal meningitis, has followed removing the shell of the middle turbinate, careful antiseptic applications should precede and follow the operation. I use the solution of Seiler’s antiseptic tablets, and sometimes of bichloride of mercury. As an application to the base of the polyp nothing is better than the electro-cautery, though chronic acid fused into a bead on the end of a probe can be used with equally good effect.

After removing the polyp Cohen recommends washing out the nose with distilled extract of hamamelis in alcohol. Sprays of alcohol, first diluted with three parts of water and gradually increased to pure strength, are also advised by McBride, Griffin, and others.

There is another form of tumor largely myxomatous in character, which originates in the nose and hangs into the post-nasal space. It is described by most authors as myxo-fibroma of the naso pharynx. Such growths, in my experience, are not usually associated with anterior nasal myxoma. They are generally single, though sometimes bilateral. I recently removed a large myxofibroma from each post-nasal passage of a little boy thirteen years old. He had no other nasal affection. The growths were attached, as they usually are, near the margin of the nose posteriorly. I removed them with the Jarvis snare introduced through the nose and guided by the rhinoscopic mirror. These growths are harder than true myxoma, and not so hard as the fibroma. They are usually distinctly pedunculated, and move about with the movements of the palate and with change in position of the head. Nasal obstruction is generally the first symptom observed. The voice is changed and pressure on the mouth of the eustachian tube often causes deafness and tinnitus aurium. Such growths are generally invisible by anterior examination, and the diagnosis should be made by the rhinoscopic mirror. When this can not be used, the finger introduced behind the palate and directed to the post-nasal cavities will give knowledge of the tumor and its consistence. But usually, even in children (not infants), a rhinoscopic
view can be obtained. The attachment and consistence of the growth can be ascertained by passing a probe through the nose, directing its manipulation with the rhinoscopic mirror. If the probe is wrapped at the end with absorbent cotton and dipped in a four to a ten-per cent solution of cocaine, it prepares the parts at the same time for operation.

Such tumors should be removed by the snare. I prefer to introduce Jarvis' snare through the nose. During introduction the wire should be drawn into a small loop, and when the snare is in place it should be pushed out to the required length. Of course cocaine should first be applied, which can best be done by the probe introduced as just described.

In the case of one very nervous lady I found much assistance from a dose of valerian given by her family physician just before she came to my office.

If for any reason the snare cannot be used, the electro-cautery may be applied either through the nose or post-nasally. Where the growth hangs down over the edge of the soft palate it may be grasped with forceps and pulled out, but this method is inferior to the snare.

There is not much tendency to recurrence, but as a matter of precaution it is well to touch the place of attachment of the polyp with chromic acid or the electro-cautery.

The following case of post-nasal polyp hanging into the pharynx and causing persistent vomiting, with great emaciation and exhaustion, presents some unique features: A negro man, between twenty-five and thirty years old, referred to me through the kindness of a general surgeon, to consult whom he had come from a neighboring county. The patient was extremely emaciated, and so weak that he could walk only with difficulty and with the help of a stick. He breathed through his mouth, and spoke as if his mouth was full. On looking into his mouth a tumor was seen lying on the tongue and looking exactly like a double tongue. At first sight it seemed to be attached low down in the pharynx, but more minute examination showed it to hang from the post nares and to be bent over the palate. The portion in the mouth was reddish-brown in color, firm in consistence, and free from sensibility on touch or pressure. It was very movable, and evidently attached by a narrow base. The patient gave a history of nasal obstruction for about two years, and of nausea becoming more and more intense for the last six months, until for some eight weeks past he had been unable to retain any thing on his stomach, and his emaciation and weakness were the consequence. On the day before I saw him, in the course of his vomiting he had thrown up into his mouth the tumor, which now rested on his tongue. Being uncertain as to the vascularity of this tumor, I determined to remove it with the electro-cautery loop. The wire was introduced over the end of the growth in the mouth and pushed up as far as possible into the post-nasal space. The mass so included was then burnt off without pain or hemorrhage. The remaining base of the tumor was destroyed by the electro-cautery introduced through the nose. It was attached near the posterior margin of the right nasal chamber. The portion removed through the mouth was submitted to Dr. Louis Frank for microscopic examination, and he reported as follows: "A tumor somewhat pear-shaped, three and one half inches long, one and three quarter inches in diameter in its thickest part, having at the ends a soft feeling, but in the central part feeling hard and nodular. On section the tumor is composed of numerous cystic (?) cavities filled with a cheesy material that is non-adherent and which easily rolls out. Microscopically the section shows large alveoli or cyst cavities filled with a substance partly cellular (round cells) and partly composed of a granular detritus, the remains of pre-existing cells. These cells stain very poorly. The cyst wall is lined with columnar epithelium, some goblet cells being present. The walls of the cyst are composed of a dense, hard, fibrous tissue containing few blood-vessels. Section through portions of the tumor not containing the cyst show only a fibrous structure. Diagnosis: Fibro-cystic polyp."

In the light of this report, and knowing the tendency to cystic degeneration characteristic of nasal myxoma and myxofibroma, it seems to me probable that this growth was a genuine myxofibroma which had undergone cystic degeneration.

LOUISVILLE.
PHARMACOLOGICAL INVESTIGATIONS
OF SALOPHEN: A NEW SALICYLIC-
ACID DERIVATION.

BY DR. W. SIEBEL.

The fact that salol, owing to its poisonous
properties, can not be employed freely in med-
ical practice has induced the Farbenfabriken,
formerly Friedr. Bayer & Co., to introduce a
non poisonous combination of salicylic acid with
acetylparamidophenol, under the name of salo-
phen. It has been demonstrated by various
investigators that salol is decomposed in the
intestine into salicylic acid and phenol, and that
the latter substance by reason of its high per-
centage may give rise to toxic effects, especially
upon the kidney.

Salophen is rapidly and abundantly decom-
polyed by the pancreatic ferments, and other
fluids of the body are capable of inducing this
decomposition, although to a much less extent.
Acid gastric juice is incapable of separating
salophen into its components, even in the liv-
ing animal. This is shown by an experiment
similar to that described by Ewald and Sie-
vers in the case of salol. The pylorus of a
dog was tied with a double ligature and then
one gram of salophen was introduced into the
stomach by means of a tube. After three to six
hours the urine was examined, but no trace of a
salicylic reaction could be discovered, although
under ordinary circumstances salicylic acid
can be demonstrated in the urine a short time
(three quarters of an hour) after its introduc-
tion into the system. About the same time
acetylpamidophenol appears in the urine, which
combines in part with sulphuric acid and is excreted in the form of ether-sulphuric
acid. If the urine is boiled with one third vol-
ume of hydrochloric acid, in order to split up the
ether-sulphuric acid, a large quantity of
paramidophenol can be demon-trated by the
indophenol reaction. The duration of excre-
tion in dogs after doses of 2 grams per ounce
extends up to three days; in human beings the
same is true.

To determine the extent of the decomposi-
tion in human beings I have made two experi-
ments on myself. I took at first 2 grams of
salophen, and collected the urine until a speci-
men no longer gave the reaction for salicylic
acid, which occurred after fifty hours. It was
found impossible to recover 88 per cent of the
ingested salophen.

In a second experiment I took 5 grams of
salophen in a single dose, which, by the way,
provoked no discomfort, and collected the urine
during a period of fifty eight hours. The total
quantity amounted to 4920 cubic centimeters.
One tenth of this amount was tested, and fur-
ished 0.2430 gram of salicylic acid. The total
quantity accordingly contained 2.430 grams of
salicylic acid = 1.719 salicylic acid, which cor-
responds to a decomposition of 67.57 per cent.

It is not surprising that when smaller quan-
tities of salophen are introduced into the sys-
tem it is utilized in a much higher degree and
even completely. There must, however, be a
limit beyond which the organism can no more
effect the decomposition. At the same time
these quantitative experiments must give us a
due as to the size of the doses required to pro-
duce a therapeutic effect. If we administer
more than 5 grams as a single dose it will not be
well utilized, and the effective quantity of sali-
cylic acid will not be greater than with medium
doses of 5 to 6 grams.

What becomes of the undecomposed salo-
phen? It does not seem to be absorbed and
excreted unchanged, for no traces of unaltered
salophen can be detected in the urine. On the
other hand, with larger doses, the feces when
treated with alcohol gave a distinct reaction
with ferric chloride, while salicylic acid could
not be detected. Therefore that portion of the
salophen which is not split up is excreted un-
changed in the feces.

The combination of acetylpamidophenol
with sulphuric acid produces an increase of
ether-sulphuric acid in the urine.

Quantitative experiments demonstrate that
the organism of the dog is capable in a much
less degree of decomposing salophen than that
of man and the rabbit, which is probably con-
ected with the nature of the dog as a carnivo-
orous animal.

If injected subcutaneously salophen is also
decomposed and absorbed, although not to the
same extent as when introduced per os.

Medium doses of 10 grams or more are well
borne by dogs without symptoms of any kind. The health of the animals is not in the least affected, and the appetite remains normal. The urine contains no traces of albumen or other substances whose presence would point to injury of the kidneys. Thus, for example, 10 grams of salophen were given to a bitch weighing 6.63 kilograms—that is, 0.663 gram pro kilo—without the least disorder. The animal remained in good health, and seven days after the administration of the drug gave birth to four living puppies. On the other hand, Mosse and Hadjes regard 0.415 gram of salol pro kilo in dogs as a lethal dose. These figures, however, can not be transferred without further qualification to human beings, because the dog's organism has a smaller capacity for decomposing this substance. For this reason the poisonous effects were studied in the rabbit, which is capable of effecting the decomposition of salophen with approximately the same energy as man.

To determine the poisonous dose in rabbits four animals were poisoned with increasing quantities:

1. Rabbit weighing 2.48 kilograms received 7.5 gram=3.0 grams pro kilo by means of the stomach-tube. No special symptoms manifested.
2. Rabbit weighing 1.170 kilograms received 5 grams of salophen=4.2 grams pro kilo. This dose also was borne without reaction. No pathological products were found in the urine.
3. Rabbit weighing 1.330 kilograms received 7 grams=5.3 grams pro kilo, without experiencing the least discomfort.
4. Rabbit of 1.480 kilograms received 10 grams=7.4 grams pro kilo. After a time the animal exhibited slight sluggishness and discomfort, but on the following morning appeared again frisky, having passed 192 cubic centimeters of urine which, contained a large amount of salicylic acid and paramidophenol, but no albumen. In the afternoon dyspnea developed, followed in the evening by spasms, to which the animal succumbed.
5. Rabbit No. 2, weighing 1.170 kilograms, which had previously received a dose of 5 grams of salophen, was given on the following morning 10 grams=8.4 grams pro kilo. After six hours dyspnea and spasms developed, which caused the death of the animal.

It will be seen therefore that a dose of 5.3 grams administered to rabbits failed to produce toxic effects; a dose of 7.4 grams pro kilo was followed by death at the end of thirty-two hours, while from a dose of 8.4 grams pro kilo the animal died after six hours. We will not therefore be far from the truth if we designate the lethal dose at about 7 grams pro kilo. Hesselbach, after administration of salol in as small a dose as 2.469 grams pro kilo, observed a constant tremor, weakness, and apathy, with complete loss of appetite, and as early as eight minutes after introduction of 7.6 gram of salol noted tremor and spasms. Salophen is therefore far less poisonous than salol.

The question now was what had caused the death of the animals, whether it was the salicylic acid or the acetylparamidophenol, and this was elucidated by the autopsy. The post-mortem findings in the case of the two poisoned animals agreed completely. Almost all the organs were hyperemic, especially the membranes of the brain and the kidneys. In cross sections of the latter small blood extravasations were found. Both auricles were distended with coagulated blood; the ventricles were empty; the blood in the larger vessels was partly coagulated; the intestinal contents were fluid. In the urine present in the bladder were found traces of albumen and a few granular cells, but no elements indicating extensive injury of the kidneys.

The microscopical examination of the kidneys revealed a considerable accumulation of red blood corpuscles in the renal vessels. In isolated places, especially in the cortical substance, there were small foci of hemorrhages into the interstitial tissue and even into the uriniferous tubes. On the other hand, the renal tissues, especially the epithelium, showed no signs of disease, not even in the vicinity of the above-mentioned hemorrhages. If we compare with these conditions the renal changes present in salicylic-acid intoxication in rabbits, as described by Hesselbach, there can be no room for doubt that we have to deal here with genuine salicylic-acid poisoning, for a characteristic feature of the latter is the renal hyperemia with hemorrhages into the tissue. If we bear in mind that the lethal dose of salicylic acid...
for a rabbit is 1.376 grams pro kilo, then the animal, if able to decompose 40 per cent of salophen, could separate from a dose of 7.4 grams pro kilo 1.506 grams pro kilo of salicylic acid, which represents more than the lethal dose.

For the purpose of demonstrating positively that the acetylparamidophenol compound does not produce the poisonous effects, a rabbit weighing 1.25 kilograms was given 5 grams of acetylparamidophenol = 4 grams pro kilo, a quantity corresponding to 7.2 grams of salophen pro kilo, that is, to a lethal dose. The animal showed no changes in its general health, remaining frisky and not losing its appetite. The urine contained no pathological elements, but large quantities of paramidophenol, which did not disappear completely until four days later. Inasmuch as the blood corpuscles of the rabbit possess a comparatively high power of resistance against blood poison, the experiment was repeated on a dog weighing 7.5 kilograms, the animal receiving within six hours 5 grams of acetylparamidophenol with its food. After administration of the last dose slight vomiting occurred. In other respects the animal showed no pathological appearances, remaining frisky, and retaining its appetite. The urine contained an abundance of paramidophenol, was darkly colored, and reduced a copper solution. Pathological elements indicating hemolysis or renal irritation, however, were not present.

Putrefaction processes are prevented by salophen if sufficient salicylic acid is set free from its combination.

From the foregoing investigations it appears that we possess in salophen a remedy to which, in a pharmacological sense, the same favorable properties are attributable as in the case of salol, over which it possesses a number of advantages, such as complete absence of odor and taste, and much slighter poisonous properties. In rare instances only salicylic-acid poisoning might result from its use if its decomposition is too energetic or its excretion impaired. The other component, the acetylparamidophenol may be regarded as entirely free from dangerous properties.

Salophen has already been tested at the Moabit Hospital in Berlin, by Guttmann, as to its therapeutic virtues. This observer expresses himself very favorably regarding his results, and, what is remarkable, he has never observed any after-effects. Although the indications of salophen have not been conclusively established, it may already be stated that its employment in medical practice promises to be varied and successful, and it would be desirable to institute as many experiments as possible with this substance.

ELBERFELD.

THE WEIGHT OF THE BODY IN ITS RELATION TO THE PATHOLOGY AND TREATMENT OF CLUB-FOOT.*

BY A. B. JUDSON, M. D.
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I desire to present a few thoughts of an extremely practical kind relating to the treatment of talipes equino-varus. Beginning with congenital club-foot it is well to bear in mind that there is a vast difference between a child recumbent and a child walking. While the child is in arms the case is yet free from the complications and difficulties caused by the falling of the weight of the body on the deformed foot. These twelve months, more or less, are the most important year in the history of the case, because in this period the foot is to be changed so that when the child begins to walk the use of a slight walking-brace, exerting only a moderate degree of force, will convert the weight of the body from a deforming to a correcting agent. During these months of recumbency, with the weight of the body out of the way, with all the tissues soft and formative, and the foot more than doubling in size with the growth of the child, there is every reason to expect to succeed in what we undertake, provided time enough be given to the case and faithful attention to the details.

The apparatus which I have conveniently used to effect this reduction, before the child learns to stand, is a simple retentive splint which acts as a lever, making pressure on the outer side of the foot and ankle at A, in Figs. 1 to 4, inclusive, and counter-pressure at two points, one on the inner side of the leg at B, and the other at the inner border of the

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*Read before the American Orthopedic Association, New York, September 21, 1892.
foot at C. It is advisable to keep in mind that this simple instrument is a lever, because if we know that we are using a lever, with its three well defined points of pressure, we can make the apparatus more efficient than if we view it in a more general way as an apparatus for giving a better shape to the foot.

I use a little brace made of sheet brass, doing the work with a few simple tools. An advantage of doing the work one's self is that there is no room for doubt as to where the blame lies if the apparatus does not work well. Two curved disks, B and C, Figs. 3 and 4, are riveted to a shank, D, and thus is formed that part of the brace which applies the two points of counter-pressure, while, on the other hand, the point of pressure is brought into action by a third disk or shield, A, which is drawn tightly against the outer side of the foot and ankle and held in place by a strip of adhesive plaster, E, which includes the limb and the piece which connects the two disks B and C. The disks are lined with two or three thicknesses of blanket, easily renewed when necessary with a needle and thread. These braces are so cheap and easily knocked together that it is nothing to apply new and larger ones, using heavier material for the shank as the child grows. In general three sizes will be enough, the shanks being 12 gauge \( \frac{3}{8} \) in. wide, 14 gauge \( \frac{1}{2} \) in. wide, and 16 gauge \( \frac{3}{8} \) in. wide. The disks are conveniently made from 22 gauge 1\( \frac{1}{2} \) in. wide. The rivets are copper belt rivets, No. 13. A lip turned on the edges of the disks with flat pliers gives stiffness to the thin brass, and protects the skin from the rough edge. If more easily obtained, tin disks, light bars of iron or steel, and ordinary iron rivets would doubtless answer.

The brace is applied with three strips of adhesive plaster. The upper and lower pieces, F and G (Fig. 4), are simply to keep the apparatus in place, which they do effectively if ordinary gum plaster is used; while, by drawing the middle strip, E, tightly over the shield, and straightening the brace from time to time, the deformity is gradually and gently reduced. At each reapplication the brace is made a little straighter than the foot at that stage. This may readily be done by the hands, and then the adhesive strip is to be tightened over the shield till the shape of the foot agrees with that of the brace. After a few days the brace is to be made still straighter, and again reapplied, and made tight till another point of improvement is gained. The brace is applied very crooked at the beginning of treatment, as in Figs. 3 and 4, and is straightened from time to time, and a longer brace applied as the deformity is reduced and the patient grows. It should be removed every week or two weeks, and an interval of a few days allowed for freedom from the brace, when the mother is advised to manipulate the foot constantly, using as much force as she will in the direction of symmetry. Manipulating the foot during these intervals is of great importance, as cases have occurred in which varus and equinus have been entirely overcome by the mother's hand alone.

By this simple and prosy treatment, carried out systematically and without haste or violence or pain, the foot, unless it is a frightful exception, may with certainty be changed from varus to valgus. At the same time the tendo-Achillis is lengthened till the position of the foot is near the norm, or at right angles with the leg, as the result of manipulation and giving the brace from time to time a partly antero-posterior action. Figs. 3 and 4 show approximately the shape of the brace at the beginning of treatment, Figs. 5 and 6 when the varus is reduced, and Figs. 7 and 8 when valgus has taken the place of varus. The foot in this latter stage may not hold itself valgus when left to
itself, but with almost no force and with one finger it may be pushed into valgus, and in this condition it must be when the child begins to walk, and then another stage of treatment begins.

Fig. 5.  Fig. 6.  Fig. 7.  Fig. 8.

When the patient begins to walk we have a new difficulty. It is now seen that the weight of the body falling on the tender and ill-formed foot will, if not properly directed, defeat all our efforts. Let us for a moment consider the mechanical environment of the human foot. In the first place, the corporal weight, which the quadruped distributes among four pedal extremities, falls in man upon two. Again, the small floor area covered by the feet and their slight structure seem unequal to the task of supporting the towering frame above them, which in some cases almost resembles a pyramid resting on its apex. And when we observe the effect of active locomotion we see weight and momentum combine in an apparent effort to crush and destroy. And furthermore, when extraneous weights are added and the strain is prolonged, as in the case of the burden-bearer among savage tribes, or the infantry soldier on a forced march, the endurance of the foot excites wonder. It is not strange that the feet are subject to ailments: to blisters, bunions, ingrowing nails, hallux valgus, hammer toes, loss of the arch, weak ankles, painful affections of the metatarsus, perforating ulcers, osteitis, and the varieties of talipes.

The wonder is that they are not permanently disabled soon after walking is begun, and certainly when the adipose tissue of the body takes on the development which accompanies age and good living. The gourmand, Savarin, said that among the works of creation the design of the human foot was a conspicuous failure. Considering the immense weight carried by the foot, it is evident, however, that only the most perfect natural adaptation of mechanics has enabled this insignificant member to perform its superlative functions, and that great caution should attend all procedures having for their object its artificial reconstruction.

It is also sufficiently evident that the correction of club-foot by mechanical means, while the patient continues walking, is a problem beset with difficulty. We have, however, a luminous ray of hope and encouragement in the observation that in talipes varus there is an important boundary line between deformity and the norm. If the foot is held in some way, now to be considered, on the right side of this boundary line, each step forces it in the direction of valgus, and the increasing weight of the child is a powerful force acting in the right direction, or away from varus, so long as the foot is held, though never so little, looking toward symmetry. It may be said that the child stamps his foot straight. If, on the other hand, the foot is held or allowed to fall on the wrong side of this line, though never so little, each footstep is a blow, driving the foot more and more into the varus position.

This point may be illustrated by the hand placed with its ulna border on the table. If considerable pressure be made on the table by the hand so placed, it becomes evident that there is a boundary line between pronation and supination. If the hand is pronated never so little, additional pressure will force the palm into pronation, which represents valgus in the foot, and if the hand be supinated in the slightest degree, additional pressure will force the palm into complete supination, which represents varus in the foot.

By the application of this idea the weight of the body may be made a beneficent instead of a harmful factor in the progress of a case of
talipes varus, and the walking-brace should be constructed with this in view. It should be made of steel, and by an instrument-maker. One of its functions is to act as a lever, but the leverage is applied not chiefly to overcome the deformity by direct force, as in the retentive brace above described, but to hold the foot on the right side of the boundary line above mentioned, so that the weight of the body may straighten the foot or overcome the varus in a direct and forcible manner without general or local inconvenience.

The walking-brace consists, as usual, of leg-band, H (Figs. 9 and 10), foot-piece, I, and upper right, J, riveted together. A movable joint at the ankle should be discarded, as it undermines the lever by introducing an element of instability, and in this brace serves no good pur-

pose. Mild steel alone should be used to facilitate alterations in shape, as point after point of improvement is gained, and to make easy the shifting of buckles and straps, as may be required, all of which may be done by the use of a few simple tools. The upright is to be on the inner side of the leg, as shown in Fig. 14. The upper part of the brace makes counter-pressure on the inner side of the leg; but it has another important function in neglected cases. It is secured by the steel band passing across the back of the leg, to which are fastened two buckles for the attachment of a piece of webbing, K, in Fig. 9, which passes across the front of the leg. The steel band should make no pressure on the limb, as its use is simply to furnish attachment to the buckles. A piece of webbing spanning the front of the leg in this manner, and carrying a pad, performs an important service in cases like the one shown in Fig. 12, in which, from previous neglect, the varus has not been reduced before walking begins. It transfers a part of the weight of the body from the anterior part of the sole of the foot, where it interferes with the correction of the varus, to the upper part of the anterior surface of the leg, where it is powerless to interfere with the treatment. That the weight-pressure thus transferred is considerable is shown by the callus and bursa, which appear where the padded strap crosses the leg near the tubercle of the tibia. This mechanical effect is similar to that of the brace shown in Fig. 11, used in the treatment of paralysis of the muscles of the calf, resulting in talipes calcaneus.

The upper part of the brace is also to be considered in another light, as follows: In previously neglected cases it is well to incline the upright 15° or 20°, or more, backward from the vertical of the foot-piece, as is shown in Fig. 9. Although correction of the equinus is postponed by this inclination of the upright, we are thus enabled to apply a better leverage against the varus; and when the varus is reduced, and the time arrives when the equinus is to be corrected, this backward inclination of the upright is to be lessened from time to time till the vertical is reached, as in Fig. 10, or till the upright has an inclination forward, allowing the corporal weight to fall more and more on the anterior part of the sole of the foot, and gradually lengthen the tendo-Achillis. The vertical upright (Fig. 10) is to be applied at once to the
patients in whom the deformity has been corrected before walking begins.

We will now pass to a consideration of the other end of the brace, the foot-piece, which is to be made of sheet steel ranging from 18 gauge for a child learning to walk to 13 gauge for an adult. It has the usual tread, L, Fig. 13, and riser, M, Fig. 10. The heel cup is formed by a piece of webbing, N, Fig. 13, passing behind the heel from the lower part of the upright to a spur, O, Fig. 13, which projects upward from the back part of the outer border of the tread. Viewing the apparatus again as a lever for the forcible reduction of varus in a previously neglected case, counter-pressure is made along the inner border of the foot and on the upper part of the inner side of the leg, while pressure is made by one strap, or

more than one, riveted and buckled to the foot-piece and the upright. But one strap is shown, P, in Figs. 13 and 14. This will be sufficient in the case of a child whose varus has been corrected before walking begins, but in a previously neglected patient, in whom the varus has yet to be reduced while the child is active on his feet, two, three, or more straps may be added, as shown in Fig. 9, partly encircling the foot, ankle, and leg, the positions of the buckles and the straps being where they will assist most efficiently in opposing the varus and holding the foot in the best position to receive the weight of the body. These parts of the apparatus may be shifted many times with advantage in the treatment of a given case of unusual difficulty, and, in addition, a most efficient agent for applying continuous pressure is found in a strip of adhesive plaster, Q, Fig. 14, sewed to a piece of webbing, R, the plaster partly encircling the foot and ankle, with a single tail, or two tails, as may be required, and the webbing being drawn tightly and buckled to the inner side of the riser. This device does more than simply to increase the amount of pressure; it also keeps the heel down on the tread of the foot-piece, and, more important still, it gives the foot a rotation outward, and thus directs the sole of the foot forcibly toward the ground in the best position for making the weight of the body a corrective instead of a deforming force. The riser of the foot-piece may also, in previously neglected and difficult cases, carry an ear, S (Figs. 9, 13, and 14), made of sheet brass, which is to be bent downward over the first metatarso-phalangeal joint, to prevent the inner border of the foot from overriding the edge of the riser. The foot-piece is to be lined with adhesive plaster, in several thicknesses if necessary, to prevent rust, and with a piece of leather fastened to the tread and spur with copper rivets, as shown in Fig. 10. In practice the details

demand as much attention as the principles of treatment. The brace is to be applied over the stocking, the strap, R, passing through a hole cut in the stocking, and is hidden by the patient's trousers and shoe.

We will now consider the upright of the brace. It is a flat, tapering bar of mild steel, and when first applied to a previously neglected case, such as is shown in Fig. 12, should have a curve resembling that of the varous foot. The bar, though sharply curved, as in
Fig. 13, should however be somewhat straighter than the foot, when the latter is forced manually into its best position. The multiple straps, shown in Fig. 9, should then be buckled and tightened daily till the continuous leverage has partly reduced the varus. The upright bar should then be somewhat straightened and another point of improvement be gained, the patient in the mean time following his ordinary pursuits without interruption. In due time the upright bar and the foot itself will both be straight, as seen in Figs. 15 and 16, in other words, the varus will be reduced. The upright should then be bent, from time to time, in the direction of valgus, as seen in Fig. 17, and the persistent and gradual effort resumed until the foot has been pushed or pulled or pried over the boundary line into the domain of valgus, as seen in Fig. 18. These efforts would not be necessary if the varus had been converted into valgus before the child had learned to stand. In very badly neglected cases the interference of the weight of the body with the treatment may be prevented by the recumbent position, or the use of a high sole on the well foot, and the ischiatic or axillary crutch until the varus has been materially reduced. In all cases, when the child is old enough to be docile, domestic instruction and drill in eversion of the foot and in the proper management of the foot in locomotion should be a part of the education.

As soon as the foot has reached the valgus shape, whether it be at the moment of learning to walk, or only after prolonged effort, in a neglected case, a curious effect will be observed. It will be seen that the outer border of the tread of the foot-piece is raised from the ground, as seen in Figs. 19 and 20, and that we have secured in a convenient manner the effect which is sometimes sought by building up the outer border of the sole of the patient’s shoe. This is a welcome and powerful ally in our attempts to hold the foot in a favorable relation with the weight of the body and the ground.

The walking-brace has been above described as though its chief use were to reduce varus which has become more or less confirmed by the habit of walking on the outer border of the foot. Strictly speaking, such cases should never occur. They are, however, too common, and always indicate that the child has been neglected from the period of recumbent infancy, when deformity of this kind is the most easily overcome. If the varus were always corrected before the child learns to stand, then the only use of the walking-brace would be, as shown in Figs. 19 and 20, to gently hold the foot in valgus, so that the weight of the body shall be sufficient to lead the child to grow up with a foot practically normal. As such a child outgrows the brace, a larger one is to be made, and when three or four years old the foot will, without the help of the brace, strike the ground so fairly that for two or three years all treatment may be suspended. The patient is to be observed from time to time, however, and as the foot grows in its original inclination to varus it will, after the lapse of two or three more years, have to be kept in proper
position, under the rapidly increasing weight of the body, by a walking-brace adapted to its needs for another period of two or three years. When the foot is full-grown it will be shapely in appearance and practically perfect in its ability to perform all the duty of a foot congenitally normal.

Although congenital club-foot has been chiefly kept in mind in the above pages, the views expressed in regard to the influence of the weight of the body are applicable also to talipes varus of paralytic origin. In this affection, at an early stage, and before the foot has lost its flexibility, a simple walking brace is needed, as in Figs. 19 and 20, to properly direct the action of the weight of the body on the paralyzed foot. At a later period, if this measure has been neglected, and the foot has been allowed to become varous and more or less inflexible, the case will require more attention, and probably prolonged effort, with multiple straps and adhesive plaster, to carry the foot across the line between deformity and the norm to the position in which the weight of the body shall be a correcting and not a deforming force.

New York.

Societies.

LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, September 16, 1892. Dr. F. C. Simpson, President, in the chair.

The essay of the evening was read by S. G. Dabney, M. D.; subject, Myxoma of the Nose and Fibro-Myxoma of the Naso-pharynx. (See page 257.)

DISCUSSION.

Dr. Wm. Cheatham: I believe the doctor forgot to mention the effect of nasal polyps upon the antral and other sinuses; their presence may be cause or effect in affections of the sinuses; by stopping communication between the nasal cavity and these sinuses, thus preventing the interchange of gases, an inflammation of the sinuses may result; or again, they may be the result of sinus inflammation, and by their presence may prevent a cure. The doctor's paper is a good résumé of the subject to date.

Dr. J. M. Ray: Dr. Dabney has given us a good résumé of polyps and their formation. It has been my experience to see polyps quite frequently in children. I remember that McKenzie especially calls attention to the fact that these growths are not apt to occur in children. In the last two or three years I have had several cases under twelve years of age. The last experience I had with growth of this character was with a child under fourteen.

As to the form of growths that project into the naso-pharynx, I believe that primarily they are the same thing as an ordinary polyp, growing backward into the naso-pharynx, developing rapidly and taking on a fibrous condition. I have removed several of them. I presented one to this Society some time since, which was a very large cyst, quite as large as a guinea egg; it filled up the entire post-nasal space. I have often seen these growths project out into the throat having undergone fibrous degeneration, being hard and dry. I believe they are simply misdirected nasal polyps developing to a greater size, and in that way becoming the so-called myxo-fibroma of the naso-pharynx.

Dr. Chilton, of Dallas, Texas: I have enjoyed Dr. Dabney's paper very much. The remarks in regard to bone degeneration in cases of myxomas, causes me to recall a case I had several years ago. When I saw the patient he had not been breathing through his nose for twelve years. I examined him time and again, and there was absolutely no bone trouble whatever. I removed, I think, eight or ten polyps, and the man recovered under the treatment very nicely, and that has been six or eight years ago. It has been my experience to find no bone trouble in these cases. I have been paying especial attention to cases of this character for some time, and have never seen any bone degeneration.

As to the benefits of after-treatment, I have found that in nearly all cases there is a recurrence of the polyp without after-treatment. In fact you always find some pathological condition which is unquestionably the cause of these polyps, and the liability to recurrence is very great.

*Stenographically reported by C. C. Mapes, Louisville.
Dr. W. L. Rodman: I would like to ask Dr. Dabney how common sarcomatous polypi are in the post-nasal space; that is, how often he has seen them?

Dr. S. G. Dabney: I only remember having seen one case of sarcoma in the nasal passages. But it is a well-known fact that the tendency of fibroma is to undergo degeneration, becoming sarcomatous in character.

Dr. J. M. Ray: I want to ask what proportion of cases of multiple nasal polypi are permanently cured by operation, or any after-treatment. In my experience, where the polypi are multiple, they will recur in spite of any treatment, before or after removal.

Dr. S. G. Dabney: Referring to Dr. Cheatham's remarks: There is no question but the condition he mentions does sometimes occur, but I have never encountered it in my experience. I believe Bosworth reports having seen several cases of that kind.

Notwithstanding the fact that McKenzie says nasal polypi are very rare in children, my experience has been very much like that of Dr. Ray in this respect. I have seen three or four cases in children under twelve or fourteen years of age.

In regard to the point made by Dr. Chilton, about bone disease, my observation is that the bone is very often diseased in cases of multiple and long-standing nasal polyp, but not otherwise. I do not think, however, that the occasion for removing the bone is because of necrosis, but the removal of a small portion of bone is often necessary to reach the base of the polyp.

It is hard to say just what proportion of the cases are permanently cured. Dr. Ray's question is a very pertinent one, and is very hard to answer, as patients are often lost sight of by the attending surgeon.

Drs. Ray and Cheatham state they never have seen a case of multiple polyp permanently cured.

Dr. T. C. Evans: In regard to the recurrence of nasal polypi, there are some cases that I have had under observation ever since I have been doing special work (four or five years) in which they have not returned. The cases I have under observation, however, were single polyps. I do not believe these are as apt to recur as in cases where there are several. I remember one case particularly which I operated upon three years ago, where both nasal cavities were filled with polyps hanging down low in the post-nasal space; they were all removed, and up to six months ago there had been no recurrence.

PATHOLOGICAL SPECIMENS.

Dr. A. M. Cartledge: No. 1. This specimen is only interesting from the rapidity of its growth. It was removed from a young man twenty-four years of age, two weeks ago last Monday. The history of the case is about as follows: Two years ago he commenced having pain in the left leg, deep-seated pain but no swelling. This continued until several months ago, then there was some swelling. His physician, who treated him in the country, consulted a surgeon at that time, and there seemed to be nothing more than just a simple enlargement of the vessels with slight swelling. An incision was made down through the periosteum, and the trouble at that time was thought to have been, I believe, a diseased condition of the bone, together with necrosis and periostitis. After this incision the tumor took on a very rapid growth, and within three weeks attained the size which you see here. It is decidedly malignant, requiring no microscopical section to prove that; one has been made, however, proving that it is sarcoma. I made a careful examination and advised immediate amputation at the thigh, which was done as stated two weeks ago. The patient left the infirmary in fourteen days from the time of amputation; there never was any suppuration, and he went home yesterday.

No. 2. The next two specimens I want to exhibit are especially instructive, showing two forms of ovarian disease; one being a very large hydrocele removed from one side, and a pyosalpinx removed from the other. There was acute ovaritis on the right side, with a small abscess on the left. Tube on the right side was fully as large as a sausage; adhesions were very dense; operation done about eight weeks ago. I report it not so much for the specimens as the subsequent course of the case. There was considerable hemorrhage, and owing
to this and on account of the large amount of peritoneal surface exposed, I treated it as I have treated several cases very successfully, by packing in a large quantity of gauze in strips, not only for the purpose of drainage, but for the purpose of hemostasis. In six hours from the time of operation the patient's temperature was 102.5° F.; in twelve hours temperature had gone up to 103° F.; pulse very rapid; pain severe. She died in eighteen hours after the operation with this high temperature. On holding a post-mortem of the case it was found that the alarming symptoms were due to intestinal obstruction, although there had been very little tendency to vomiting, but there was rapid sinking and a loop of the bowel had become incarcerated in the gauze that it was packed in. I do not think the value of gauze packing in cases of this kind, where you have extensive adhesions and a great deal of blood, should be underestimated; I am satisfied it has saved cases for me in a good many instances; I have packed in great quantities of it in bad cases without causing any trouble. I shall continue to rely upon it in these bad cases, yet in this case it was the cause of death.

No. 3. The patient from whom this specimen was removed was referred to me last Saturday by Dr. Scott; case referred to him by a physician in a distant city. Diagnosis had been made of pyosalpinx of the left side, and patient was sent here for operation. The woman, to look at her, seemed to be in fair health, color and expression good; she was a small woman and not much emaciated. On examination by the bi-manual method I determined that the woman was suffering from pyosalpinx, but was not inclined to think the disease was very extensive. The history was that she had a child about five years ago, and that three years ago she had a miscarriage with retained placenta; her physician, after the placenta had been retained for several days, performed an operation. After this she developed high fever and was in bed three or four months. Since that time she has only been able to be up a little while at a time without becoming exhausted; has been in bed the greater portion of the time. Diagnosis of pyosalpinx was then made by her physician, and she was sent here for operation. When she arrived temperature was about normal. Last Saturday I did the operation, and found about the most extensive pyosalpinx that I have ever encountered; there was a great deal of pus; the adhesions were very strong and dense, I never saw anything to equal it. The left ovary and tube had to be separated from behind the uterus, and great deal of pus escaped into the pelvic cavity. The right ovary and tube were very much enlarged and elongated; there was also an abscess on that side containing about a half pint of pus. The cavity was thoroughly irrigated, glass drainage-tube being used. The discharge from drainage-tube was clear serum by Monday and was removed Monday afternoon. The patient was quite weak, pulse going up to 130. She has done uninterruptedly well, however, since the operation; has had no pain. Sutures were removed to-day, abdomen perfectly flat, and there has been no further rise in temperature.

No. 4. The next case I think is of especial interest. Patient a woman thirty-five years of age, and gives about the following history: Five or six years ago she had an attack of severe pain, coming on suddenly about the stomach—referable particularly to the stomach and somewhat to the right side. Her husband, who is a physician, thought it an attack of bilious colic. He called a consultant, who differed with him, however. He searched the evacuations for two or three days after this, but was not rewarded by finding any evidences of biliary calculi. The woman grew better, the pain entirely passing off. From this time up to the present she has been having these attacks of intense pain, lasting anywhere from three or four hours to a day or a day and a half, and during these intervals several times her husband examined the stools but was never able to find gall-stones. The patient has been examined by several physicians, and diagnosis made of gastric colic, gastritis, etc.; there never was any jaundice whatever. One week ago last Wednesday she had a very severe attack, and her husband found it necessary to give chloroform to control the pain, also large doses of opium; this continued all day Thursday and Friday. Dr. Scott saw the case in consultation on Saturday afternoon, and upon examination discovered
an enlargement in the region of the gall-bladder about the size of a fist, and thought the trouble was in the gall bladder. I saw the case in consultation with him on Saturday night, made a very careful examination, found abdomen very tender, pain still intense, patient taking dangerous doses of morphine. I perfectly agreed with Dr. Scott with reference to the location of the trouble, and we decided to operate Monday. On Monday in the forenoon we did the operation of cholecystotomy, making an incision two and one half inches in length over the liver, going through the peritoneum. On opening the peritoneum it was found that the gall-bladder was covered throughout its anterior surface with a thin margin of liver; this was raised up—while it was movable to a certain extent, there were some adhesions on the lower surface. The gall-bladder, on account of its great distension, had to be aspirated, and we drew off about two ounces of greenish-looking mucus, which seemed to be mixed with pus. I then made an incision into the gall-bladder and searched for stones. Seven large stones were removed, one being embedded deep in the cystic duct, which was removed with some difficulty. From the time of the operation the woman did well, had no further pain excepting for an hour or two; temperature never rose above 99° F. She is now up and the fistula gives evidence of rapid closing. On the second day after the operation I gave the patient an enema, and a mucus cast fully thirty inches in length and as large as a finger came away with the evacuation.

Dr. W. L. Rodman: The first specimen shown by Dr. Cartledge, I take it, is undoubtedly sarcoma, probably of the round-cell variety. I do not think that any thing has practically been added to the history of sarcoma of the long bones, since the paper written by Dr. S. W. Gross, in 1880. He made it clear at that time that sarcoma of the long bones was most liable to occur in persons from twenty-four to twenty-eight years of age. They run a very rapid course as a general thing. I think Dr. Cartledge gave this man the only chance of his life; that is, going above the growth and removing by amputation.

Dr. Cornelius Skinner: In regard to the second and third cases reported by Dr. Cartledge and his treatment for the hemorrhage after removal of the specimens exhibited, after breaking up the adhesions, etc., I have employed the gauze packing in a number of cases and have never had any trouble such as he mentions, neither have I ever seen any thing of the kind reported before. I would like to ask if he put this gauze loosely in the cavity, or packed it in solidly. The bowel will sometimes slip down; in packing this gauze over you can see how the gauze could be lapped over the bowel without being observed, and then more gauze put down over the top of that would constrict the bowel, the bowel slipping in between the packing. This packing should be done with a great deal of care, and our attention having been called to the accident will, of course, make us still more careful in these cases.

This also opens another question, the treatment for abortion. One of the cases I believe had aborted, and the operator had attempted to remove the placenta after a certain delay. I think the result proves that these cases should be let alone; that no instruments should be used, and that the uterus should be left to expel the placenta in the natural way.

In the treatment of ovaritis and salpingitis, the cases reported leaves us just about as much in the dark as before. The question that is attracting attention just now is, when should we operate, whether in the primary attack or wait until the second or third attack, or until pus forms. Something more than a year ago I had a lady under treatment for an attack of salpingitis; thought at the time there was pyosalpinx, and so expressed myself, recommending an operation for removal of the tube (which, however, was not performed), and saying that the woman would never give birth to any more children—she was already mother of two. Dr. Hewitt saw the case with me and agreed that there was pus in the tube, as it felt quite large; he also agreed with me as to the prognosis concerning child-bearing. Last Saturday, after all of this prognosis, I delivered this woman of a healthy boy baby. However, she carried this child with a great deal of discomfort all through the nine months. She did not have one day of comfort in all the time, was not able to go out of the house.
There was nothing of this kind in the two previous pregnancies. I never could find out just what it was that excited this inflammation.

CORNELIUS SKINNER, M. D.,
Secretary pro tem.

Reviews and Bibliography.


Owing to the great changes that have taken place in both the theory and practice of obstetrics since the third edition was published in 1885, the author has found it necessary to present to the profession what he regards as essentially a new book.

He has made it his endeavor to interweave aseptic precautions with all branches of obstetric art, without, however, as he justly puts it, insisting on pediatric measures. This is a manifestation of sobriety that those of us who had the good fortune not to go wild on antisepsis will welcome with satisfaction. The mind of the author seems to be of an eminently practical nature; he seldom theorizes, and, indeed, not seldom fails to pass on the theories of others. In the author of a text-book this is indeed rather an advantage than otherwise, for it is not easy for the theorizer to refrain from giving excessive prominence to the offspring of his own imagination.

The author accepts the teaching that the amniotic fluid is derived at first from the tissues of the fetus, and later both from the maternal and fetal tissues. He quotes opinions for and against the probability that the fluid is utilized as nourishment by the fetus, but ventures no opinion of his own.

He inclines to the opinion that as a rule the cervix does not contribute to the formation of the uterine cavity before the commencement of labor, but that as a rule it maintains its independence till the beginning of labor. To this, however, he thinks there may be exceptions.

The cause of head presentation is left virtu-
shows large improvement over previous issues. While there is no marked or startling advance anywhere recorded, a vast number of crucial experimental tests have been reported in every department of medicine that are calculated to prune it and train it into the form and dimensions of an exact science. The editor in the title of the work has seen fit to substitute the word "sanitary" for "sanatory," as more commonly used, and which we should have thought more appropriate to a work of this character. It has been lately announced that the editor is on his way to France with a view of arranging to get out a French edition of the work for the next issue, and there can be little doubt that in the next few years arrangements will be completed for the production of this work in the languages of all progressive nations.

More knowledge can be gained from a study of these volumes than any one could gain by reading if he had at his command all the journals that are published and could read them all with perfect facility.

D. T. S.


In reviewing previous numbers of Dr. Bramwell's Atlas of Clinical Medicine, we spoke of it as meriting unqualified commendation, forming as it does an illustrated treatise on clinical and systematic medicine of the highest order, both from an artistic and descriptive point of view.

Subscribers resident abroad will receive the work in parts (unbound), carriage, but not duty, paid, at the ordinary subscription rate, £1, 11s. 6d. ($7.50) per volume, provided they send their subscriptions direct to Messrs. Constable.

D. T. S.


This is a very neatly gotten up and well-written treatise on natural mineral waters, with more especial reference to the waters of Saratoga. The work seems to be fair, and is written in popular style so as to be easily understood by any well-educated layman.

It would prove a good companion for any one contemplating a stay at any of our watering-places.

D. T. S.

Translations.

Lead Poisoning from a Bullet Embedded in Bone (Ein Fall von Blewegiftung durch eine un Knochensleckende Kugel.—By Prof. Küster and Dr. L. Lewin.) A man thirty years of age received a bullet in the tibia just below the knee-joint. The wound healed, leaving the patient suffering only from slight limitation of motion in the knee. For over seventeen years he remained healthy, then symptoms of chronic lead-poisoning appeared, and lead could be demonstrated in the urine, but no albumen. Küster explored the bone, and found the bullet had been shattered into small particles, which were spread throughout its track. All was removed, and the patient slowly recovered from the lead-poisoning. Küster thinks the case is to be explained by encapsulation of the lead by bloodless cicatricial tissue, which was gradually replaced by more vascular tissue, and thus the lead was exposed to the blood-current and dissolved—its fine subdivision assisting this absorption. Only three other cases could be found in literature, and none after such an interval of quiescence. He excludes a cumulative effect of the lead by the long duration of the free interval, and by the fact that there was no albumen in the urine, showing that it was probably not due to a beginning irritation and defective elimination by the kidneys.

La Séméaine Médicale. No. 36, contains the following: Haffine has increased the malignity of the cholera bacillus by passing a deadly amount of a pure culture through a series of animals, one after another. The poison after passing several animals becomes constant, that is, a certain amount will then kill the animals in the same length of time. He has succeeded in rendering the cultures less
deadly by making cultures at 39° C. under continuous draft, and transplanting every two to three days to prevent the complete dying out of the culture. In this way he has procured cultures of reduced power which he has used for vaccinating animals; no disease followed the vaccination, and a following infection with the most malignant cultures of cholera bacillus proved ineffectual. An animal so vaccinated is protected against any form of infection with the cholera bacillus, even against infection through the stomach preceded by dosing with opium to render the intestines perfectly quiet and non-resisting.

Pick (Centralblatt für Bakteriologie, No. 9) mentions the influence of wine on the development and growth of the typhoid and cholera bacilli. The typhus bacilli, after a short exposure to wine, or equal parts of wine and water, were nearly all killed, while after twenty four hours' exposure to some fluids no colonies at all could be raised. The cholera bacillus showed himself still more sensitive to the wine and water mixture. After ten to fifteen minutes no more bacilli could be found capable of reproduction. From this it would appear that at times of typhoid or cholera epidemics it would be wise to mix with all drinking water an equal part of wine; and, moreover, to let this mixture stand for twenty-four hours before using it. It remains to be determined exactly how far the dilution can be carried and still remain serviceable.

The Deutsche Medizinal Zeitung publishes the following prescription of one Dr. Julius Beer, a one-time familiar cholera prescription. It is the flower of the old-fashioned "shot-gun" prescription:

Ext. nuc. vomicae ................................ 0.63 parts;  
Tr. opii simplex ................................  3.75 "  
Guttae Lorenzi ...................................  7.50 "  
Tr. cinnamomi ......................................  15.00 "  
Tr. cascarill, Tr. columbo, Tr. pavanii ..........  7.50 "  
Tr. zingiberis .....................................  11.00 "  
Tr. capsici annum ................................  3.75 "  
Ol. calami ........................................  x "  
Ol. menth. pip. ....................................  x "  

Sig: Take a teaspoonful in peppermint every quarter of an hour. (And in spite of this the patients died.)

Dr. Bergweid in (Warschau Deutsche Medizinal Zeitung, No. 73), finds that iodoform 1,1,000 kills the common bacillus in one minute, and 1,100,000 in twenty-four hours. Iodoform 1,80,000 does not kill them but stops their growth. He therefore recommends iodoform in small doses as a prophylactic measure, and two or three times as large doses as curative.

JAMES B. BULLITT.

Abstracts and Selections.

Abstract of Proceedings of Michigan State Board of Health, Lansing, October 11, 1892.—The following named members were present: Arthur Hazelwood, M. D., Grand Rapids; Mason W. Gray, M. D., Pontiac; Prof. De los Fall, M. S., Albion; Hon. Frank Wells, President pro tem., Lansing, and Henry B. Baker, M. D., Secretary, Lansing.

The Secretary presented his report of work done in the office during the last quarter. A large part of it was in the direction of efforts for the prevention of the introduction of cholera. On account of the possibility of the introduction of cholera, there was a large number of telegraphic and written communications, which were out of the ordinary line of work, and needed prompt attention. The three pamphlets on the Restriction and Prevention of Consumption, Scarlet Fever, and Diphtheria were revised and reprinted. There was an unusual call for the pamphlet on cholera; one city asked for five thousand copies. Not so many were sent, but a large number were distributed. The pamphlet on the restriction of cholera was revised, but is not yet reprinted.

Samples of proposed International Health Tickets were presented from the Secretary of the American Public Health Association, who was a committee of the International Conference of State Boards of Health. It is proposed to have these tickets adopted throughout the continent: the tickets to be issued to immigrants by the inspector at the place of debarkation and to be carried until taken up by the local inspector at the immigrant's final destination. By a note, in different languages, the immigrant is made to understand that it is to his advantage to keep the ticket in his possession. These tickets are to be conveyed, by parts punched out at starting place and by inspectors along the line, valuable information to all the inspectors, who are to possess the key, such facts as name of possessor of tickets, date of issue, whether or not from an infected locality, the
name of the disease with which the immigrant is possibly infected or exposed, where and how long detained, how the person, clothing on the person, and baggage had been disinfected, and other facts which might save detention, disinfection, etc., or lead to careful surveillance for the time of probable danger. The secretary has suggested amendments, and it is hoped that this ticket system may soon be perfected. Those in use at present do not convey the necessary information, and by the Michigan State Inspectors very little reliance is placed on them.

Secretary Baker remarked that the cholera having ceased in New York and the newspapers having much less to say of cholera, the public seem to have concluded that the danger of the introduction of cholera has ceased. A few health officials seem to have the same view. Holding the view that the danger of the introduction of cholera has not lessened, except that the numbers of immigrants are less, and desiring to know the views of prominent and neighboring sanitary officials, the Secretary had addressed a circular letter to them. Another point on which he desired to learn their views was the question of the relative danger of the introduction of cholera—by immigrants coming from ports not known to be infected, compared with immigrants coming in a ship on which cholera had occurred, from a port known to be infected—such a vessel, for instance, as the "Normannia," which was detained so long in the port of New York, and whose passengers had been so dealt with as to make it probable that they would not convey cholera; his own view being that the danger was greatest from baggage which may find its way from some of the many cholera-infected centers to an uninfected port from which it would come to this country, and because from an uninfected port pass quarantine without detention or disinfec-
tion. In response to his questions, letters were received from Dr. J. T. Reeve, Secretary Wisconsin State Board, Dr. J. F. Kennedy, Secretary Iowa State Board, Dr. F. H. Devaux, Secretary North Dakota Board, Dr. J. N. McCormack, of Kentucky, President of the International Conference State Boards of Health, and also Dr. Walter Wyman, Supervising Surgeon-General U. S. Marine Hospital Service, who says: "Your views concerning the great danger of the introduction of cholera through the medium of baggage of immigrants arriving from some port believed to be unininfected, and upon a vessel without any history of infection, are entirely in accord with my own, which I expressed in a letter to the Secretary of the Treasury as early as July 7th." Telegrams were received from Dr. Lachapelle, President Provinicial Board of Health of Quebec, Dr. Hewitt, Secretary Minnesota State Board, and Dr. F. W. Reilly, Secretary Illinois State Board. Dr. Reilly said: "Without indorsing the principle of a detention quarantine of a fixed number of days under ordinary circumstances, the Illinois State Board approves the action of the Michigan State Board of Health in enforcing a twenty days' quarantine on immigrants from European ports seeking entry into the United States through the Dominion of Canada. This action is approved because it is believed immigrants are shipped through Canada for the purpose of evading the United States twenty days' quarantine. In the judgment of the Illinois Board, the United States quarantine is defensible on the ground that its effect, if not evaded, would be practically to prohibit immigration until danger of cholera importation had passed."

Besides the communications from State officers already mentioned, other letters were received. U. O. B. Wingate, M. D., Health Commissioner of Milwaukee, in his reply, said: "I certainly do not think that we should relinquish any vigilance in this matter during the winter, and that, as you say, there is a great deal more danger of having the germs introduced into this country from unexpected sources than from vessels that we know are infected. . . . . . I do not think the Northwest should rely entirely on the quarantine at our seaports, knowing as we do how imperfect disinfection is at certain stations, but that a double quarantine and disinfection should be established in the country to protect this part, for we are peculiarly situated in regard to exposure, being subjected to the enormous number of immigrants that are locating in and passing through the Northwest. I believe with you that this is not a matter confined to the World's Fair alone, but it is a matter which affects the whole prosperity of this part of the country." John D. Ware, M. D., Health Commissioner of Chicago, in his reply, said: "I think as you do in relation to immigration to this country by the way of the St. Lawrence and points in Canada. I believe that your order relative to quarantine is a most excellent one, and so far as this department is concerned, I wish that it was carried out with all ports."

Extra Uterine Pregnancy.—Dr. Rufus B. Hall, of Cincinnati, Ohio, read at the American Association of Obstetricians and Gynecologists, at St. Louis, Mo., September 20th, 21st, and 22d, a paper entitled, "Six Consecutive Cases of Extra-Uterine Pregnancy, and the Lesson they Teach." The author said he would try to illustrate and emphasize a few facts in connection with the subject
of extra-uterine pregnancy, which are of great practical importance to the general practitioner and the specialist alike. He illustrated from clinical facts the difficulty attending a correct diagnosis as to intra- and extra-peritoneal rupture of the sac in extra-uterine pregnancy in the early months of gestation, and the danger to the patient in attempting the same, thus encouraging delay in making the necessary operation in those cases where the rupture has occurred. In the six cases reported for the basis of his paper, five had ruptured before the operation was made. In all the ruptures had occurred from three to four weeks before the operation, and in every instance the sac showed conclusively that the rupture was free into the peritoneal cavity from the first, and not into the folds of the broad ligament. The author dwelt upon the fact that in two of the cases, the first and the fourth in the series, the blood clot had become so firm by the absorption of the fluid portion of the blood, and from the adhesions of intestine and omentum above, so as to depress the pelvic floor, making it appear from the physical examination that the hemorrhage was really in the folds of the broad ligament. That all recovered, when we consider the clinical history in the individual cases, must be considered in the nature of a happy surprise. The lesson conveyed in the report of the cases was that there are no certain means of knowing before the operation whether or not the rupture has taken place into the peritoneal cavity or the broad ligament; especially is this true if the rupture occurs in the first few weeks of gestation. Therefore, if we treat all cases of rupture as if they were really ruptures into the peritoneal cavity, it would be correct practice. The author of the paper believes, if a case comes under observation before the fourth month of gestation, it is the duty of the physician not to wait until he is certain that rupture has taken place into the peritoneal cavity before advising an operation, but to give the patient the best chance for her life—and that is an abdominal section—and that without delay.

Chemistry of the Cholera Bacillus.—Ferran (Compt. Rend. de l'Acad. des Sciences, exv, 101) states that when the comma bacillus is cultivated in a slightly alkaline bouillon, containing lactose, paralactic acid is produced in quantity sufficient to render the liquid distinctly acid. When this microbe is sown upon agar that is slightly alkaline, and containing lactose as well as litmus, the medium becomes red from the formation of paralactic acid. A cultivation in a slightly alkaline bouillon containing lactose presents, after being left at rest at 30° C. for five days, a floating mycoderm, consisting of large comma bacilli, in the interior of which may be seen one or two very small granulations analogous to spores; eventually all the protoplasm of the bacillus disappears, leaving exposed these small granulations, which are readily colored by methyl violet. The small bacillus sown in a small quantity of alkaline bouillon, contained in a capacious flask, may remain alive for more than three years, provided that the flask is closed by cotton wool which will allow of the renewal of the air. Under the very same conditions, and with the sole difference that the bouillon contains some lactose, the vitality of the microphyte is rapidly extinguished by reason of the acid character communicated to the medium by its own action. In ordinary culture bouillons the growth of this microbe is always rapid and luxuriant; but when the bouillon contains lactose it is disproportionately less prolific. The colonies become very numerous in consequence of the addition of that substance within a few hours; but the growth ceases completely as soon as the medium becomes acid, and before long the vitality of the microbe is destroyed. Ferran calls attention to the resemblances between the chemical function of this microbe and that of B. coli communis. In many particulars their pathogenic functions are also similar. Paralactic acid paralyses the chemical activity of both. The known value of that acid as a remedy for the diarrhea caused by B. coli suggests the probability that its administration in cases of diarrhea caused by the comma bacillus might be equally efficacious and beneficial. M. Ferran therefore thinks that as a remedy for cholera it would be reasonable to administer lactic acid in the form of lemonade and to assist its action by morphine, which might probably prevent the absorption of toxines and prolong the influence of the lactic acid by reducing the rapidity of its elimination.—British Medical Journal.

Treatment of Hematemesis in Anemic Young Women.—Gastric ulcer seems, from post mortem records, to be not very unequally divided between the two sexes. Still, hematemesis is without doubt far more common in the female. In many cases of hemorrhage there is no ulcer worthy of the name, and the hemorrhage arises from a burst capillary or small vein. Rupture of these small vessels is favored by anemia, partly by fatty degeneration of the vessel walls from malnutrition, partly by general rise of the vascular tension—without doubt a common thing in anemia—and, lastly, by some backward pressure in the gastric venous circulation, from the dilatation of the right heart, which is inevitable in all severe cases of
anemia. In my experience it is the anemia, constipation, and feeble heart which urgently demand attention. It is possible to restrict too much the diet in hematemesis; but, of course, we can not easily distinguish those cases where the blood is poured from the surface of an ulcer from those in which no appreciable ulcer exists. Of course there must be a break of continuity for the hemorrhage to occur; but the best guide to the dietic treatment is the state of irritability of the stomach as indicated by pain and vomiting. Either of these is the effect of gastric ulcer, and they indicate either inflamed ulcer or acute catarrh. If these two conditions are absent, a case of gastric ulcer may be safely treated, just as one of hematemesis apart from ulcer. Hyperacidity, which greatly favors the continuance of ulceration, which is indicated by pain coming on half an hour or so after food, and which may be diagnosed with certainty by the aid of the stomach-tube, should be met by alkalies, and fine, light food does no harm in such cases. Rapid healing can not be expected save with abundant nutrition. Where hematemesis is due to anemia and anemic dilatation of the right heart, leading to congestion of the gastric veins, digitalis is not needed so long as the patient is kept strictly in bed, but directly the patient gets up, unless the tricuspid murmur and dilated right ventricle have disappeared, as the result of the prolonged rest, and treatment by iron and aperients, digitalis should certainly be given, and will prove of great service. —

**Dr. H. Handford, Therapeutic Gazette.**

**Complete Laryngectomy for Cancer.** — E. Orechich, Director of the Hospital of Massa-Carrara, reports (Riv. Med., August 31, 1882) the following case: A man, aged fifty-five, whose sister and two maternal aunts had died of scirrhus of the breast, came under observation on April 26, 1892. Four years previously he began to suffer from hoarseness and slight dyspnea, and about a year after the first appearance of these symptoms a small polypus was extracted by the endolaryngeal method by a laryngologist in Florence. This operation was followed by improvement of the voice. From four to five months later the symptoms returned, and gradually became more severe, till in September, 1891, suffocation seemed to be imminent. On two or three occasions the dyspnea only ceased on the occurrence of hemorrhage from the larynx. On admission, a swelling was observed in the middle of the neck, bounded on each side by the sterno-mastoid muscles, and extending from the hyoid bone to the epi-ternal notch. The skin over the swelling was edematous. The breath was fetid, the breathing noisy, the voice reduced to a hoarse whisper. There was no difficulty in swallowing. With the laryngoscope nothing could be seen but a fungating mass at the root of the epiglottis completely hiding the interior of the larynx. Microscopic examination of the polypus removed by the Florence specialist showed that the disease was epithelioma. No enlarged glands could be felt in the neck. The swelling having been reduced by continuous inhalations of a boric solution, and the mouth, teeth, and pharynx having been cleansed by frequent washing and gargling during some days with a similar solution, the larynx was completely excised on May 14th. The operation lasted one hour and a quarter, and very little blood was lost. The upper end of the trachea was fixed to the skin with silk sutures. A gum-elastic catheter was passed into the stomach through the mouth, and the wound stuffed with iodoform gauze. The temperature never rose above normal. The esophageal tube was left in situ for two days, and after that introduced only when food was to be given. For twenty days the patient was fed through the tube: eight or ten eggs, $\frac{1}{3}$ liter of milk, a bowl of broth, and $\frac{1}{3}$ liter of red wine being given in the twenty-four hours. Three weeks after the operation the wound was so far healed that the patient could feed himself without the help of the tube, and ten days later only a linear median cicatrix was left, with a circular aperture representing the tracheal orifice, through which a metal cannula was inserted. On June 30th the man left the hospital, much improved in health. He was able to make him-elf understood in speaking, and Orechich thinks that, with the help of a simple mechanical contrivance and with practice his speech will become more intelligible. **British Medical Journal.**

**Tachycardia.** — Hempeln (Deutsche Med. Woch., September 1, 1892) relates a case which ended in recovery after a period of fifteen years, and in which the habitual form of the disease was accompanied by paroxysmal exacerbations. A man, aged forty-seven, had acute rheumatism in 1876, complicated by a fibrinous pericarditis. In the fifth week of the disease, the pulse was 152, and during the next two weeks it varied between 140 and 160. Notwithstanding this, the patient improved and left his bed in the eighth week, the pulse being 140 to 148. In 1876-77 the pulse fell to 120. The habitual tachycardia did not seem to cause any inconvenience. In 1886 there were superadded paroxysmal attacks of two distinct kinds, namely: (1) Palpitation; and (2) a paroxysm of greatly increased tachycar-
dia. The former was brought about by exertion, and was characterized by violent and rapid cardiac action. The latter had no such cause. This attack began by a lessening of the frequency of the pulse, then a feeling of oppression, and the pulse rate mounted to 240 or even 250 per minute. There was great anxiety as well as nausea and sweating. The attack lasted two, four, six, or even eight and a half hours. These attacks repeated themselves each year. In 1891 he had an attack of palpitation lasting fifteen minutes, and followed by a feeling of suffocation and great weakness. This continued during eight days, when the heart's action became so violent and irregular that the patient thought he was about to die. He fell into a sleep and woke up with a pulse of 88. From this time the tachycardia entirely disappeared. The author does not think that the habitual tachycardia was a cardiac neurosis. It was not due to paralysis of the vagus or irritation of the sympathetic on account of the long duration and ultimate recovery. Hempel is of opinion that it was brought about by the pericardial adhesions, and that it was a compensatory measure. He would, however, attribute the paroxysms to a neurosis, and would explain the recovery by the adhesions being broken down in the last violent attack of tachycardia.—Ibid.

The Tuberculous Infection.—Billet (Arch. Gén. de Méd., August, 1892) refers here chiefly to cases in which the diagnosis of tuberculosis is given up generally in favor of enteric fever, and chiefly because the patient recovers. It is among these cases, so to speak, of false enteric fever that the disease called by the author infective tuberculous fever must be sought for. In the question of the possibility of the arrest of acute tuberculosis the author refers to the evidence of morbid anatomy which shows not infrequently the healing of pulmonary tuberculosis. There is no reason why tubercle bacilli should not behave like other micro-organisms, and fail to develop either owing to unfitness of soil or their own diminished virulence. Abortive attacks of other infective processes such as variola, scarlet fever, are admitted. The author then gives in detail two cases of this infective tuberculous fever. Both patients recovered and have remained well, the one for sixteen months and the other for eight months after the illness. The points in the clinical behavior of the disease are then discussed. The onset begins with digestive disturbances. Headache is usually present, but there is no epistaxis. The temperature soon rises and presents an irregular course, but this is often interfered with by treatment. The pulse is more rapid than in enteric fever, and there is no diacotil. The headache generally disappears early, and any cerebral symptoms present are but slightly marked. There is no stupor. The abdomen is not distended and diarrhea is rare. Special attention should be paid to the lungs. Adventitious sounds, including suberepititary ones are heard, especially over the apices, and the breathing is harsh in this situation. If the patient recovers these signs disappear, and if he dies, only a few tubercles are found in the apices. A third method of ending is by chronic tuberculosis. Other diseases which have to be borne in mind are malaria and intoxications from food stuffs. In the treatment special mention is made of antipyrin and of small doses of tartar emetic.—Ibid.

Cholera and its Treatment.—William Walker, M. B., C. M., Mis-ion Dispensary, Walajabad, communicates the following to the Medical Reporter, of Calcutta: I wish to bring to the notice of the readers of the Medical Reporter a system of treatment which I have carried out in cases of cholera during the past three years in the Mission Dispensary, Walajabad, in the villages round about and in Conjeveram.

I can not give the number of patients treated as I have not got the books convenient, but I can say that all the cases have recovered where our treatment has been strictly carried out.

When the native quack comes in to help matters in his own way, the patient seldom recovers. Now we never continue to attend a patient when we find a quack there, because, should the patient die, a likely occurrence, we will be blamed, but if the patient recovers the quack will take all the credit. When a case of cholera comes, we give the following prescription, which for convenience we call "C. Chlorodyne" for cholera:

- Spt. menthe pip. 5 ii;
- Spt. camph. 5 ii;
- Spt. chloroform. 5 ii;
- Tinct. capsicum. 5 ii;
- Tinct. ginger. 5 vi;
- Tinct. catechu. 5 ii;
- Tinct. digitalis. 5 ii;
- Acid hydrocyanic dil. 5 ii;
- Glycerine. 5 iii;
- Spt. vini rect. 5 ii.

Sig: M. 20 in 51 of water, every fifteen minutes, until vomiting and purging stop.

When the cases come we at once begin with twenty drops of the chlorodyne in a teaspoonful of water, and if necessary go on giving the same amount every fifteen minutes, but we seldom find more than one or two doses required.
During the treatment the usual methods are carried out for keeping the patient warm. Drinking cold water is not allowed, as it is apt to bring on vomiting.

After the vomiting and purging have been settled, if the patient is not much reduced, weak congee made with corn flour, but if collapse threatens or has set in, we give equal parts of milk, brandy, water, and digitalis or sp. ammon. arom., according as the heart or kidney seems weakest.

A few drops of the above into the mouth every four or five minutes until the patient begins to rally, after which congee is given and continued for some days.

My reason for making up and trying this prescription in cholera was, that I wanted something to stop the vomiting, yet without opium, as I felt that it did a great amount of harm.

I find the “C. Chlorodyne” of great use in the diarrhea and dysentery of children too young to take chlorodyne containing opium. Another chlorodyne called “D. Chlorodyne” I have used in cases of diarrhoea and dysentery, but never in cholera, because it contains opium.

The following is the prescription:

- Spt. menth. pip. .................. 5 liss;
- Spt. canth. .................. 5 liss;
- Spt. chlorof. .................. 5 liss;
- Tinct. capsici .................. 5 liss;
- Tinct. ginger .................. 5 liss;
- Tinct. opil .................. 10 liss;
- Tinct. catechu .................. 3 liss;
- Acid hydrocyanic dil. ............ 2 liss;
- Glycerine .................. ad 1/2 xii. M.

Dose for adults, 5 l in water.

One dose in a large number of cases is all that is necessary to stop diarrhea, etc., but if necessary any dose up to 5 l can be given in two hours, or repeated at longer intervals, as the condition of the patient requires.—Medical Reporter, Calcutta.

Phenosalyl, a New Compound Antiseptic.—At Pasteur’s Institute, Paris, Dr. De Christmas has for some time past been engaged in the study of compound antiseptics, that is, mixtures of several bactericides; a report on his earlier experiments has been published in the April number of the current volume of this journal. More recently he has been devoting his attention to a mixture of antiseptics, which he calls “Phenosalyl,” and which has the following composition:

- Carbolic acid .................. 90 parts;
- Salicylic acid .................. 10 part;
- Lactic acid .................. 20 part;
- Menthol .................. 1 part.

The three acids are heated up to the point of liquefaction, when the menthol is added. The mixture is reported to be very soluble in glycerin, and easily soluble in water to the extent of four per cent.

The author has made a careful comparative study of the action of phenosalyl on the staphylococcus aureus, the schizophrenic most resistant to the influence of chemical bactericides, and has found it to be possessed of enormous antiseptic power; the latter is almost double that of its two constituents—carbolic and salicylic acids—taken separately, and exceeded only by that of corrosive sublimate.—Merk's Bulletin.

Treatment of Erysipelas.—Cavazzani (Gl. Incurabili) draws attention to a plan of treatment first advocated by him for erysipelas as long ago as 1867. It consists in the application every two hours to the affected part by means of a brush of the following mixture:

- Tannin, .................. 1 part;
- Camphor, .................. 1 part;
- Ether .................. 8 parts.

With this simple treatment highly successful results are recorded in one hundred cases of varying severity. In another series of five cases the author applied in the same way a one per cent alcoholic solution of fuchsin with quite satisfactory results. As to the mode of action and the general efficiency of this latter application, he refrains from making any suggestions till a further trial has been made. Suchis (Bull. Gén. de Thérapeutique) places on record four cases of erysipelas which progressed most favorably under the influence of ichthyol. The drug was employed dissolved in collodion in the proportion of one in ten, and was applied by means of a brush to the affected region.

Ice in Dysentery.—In dysentery, when the lower part of the colon is affected, the local use of ice sometimes has an almost marvellous effect. H. C. Wood has seen the whole aspect of a very severe and alarming case, in which the symptoms indicated that the colon was affected high up, changed in a single hour by the continuous use of ice suppositories. While it is not necessary to have the pieces of ice entirely regular in shape, care should be exercised that no sharp edges are left. The suppositories should be rapidly used, one being put into the rectum every three to five minutes, so as to get, for at least half an hour to an hour, the effect of the continuous application of cold. When the tenesmus is very severe, iodoform suppositories are often much more efficient than opium in bringing relief.—Columbus Medical Journal.
THE CHLOROFORM CONTROVERSY.

Notwithstanding the positive testimony to the contrary by the Hyderabad Commission, as set forth in the masterly and seemingly final report of Lauder Brunton, there still is a belief in the medical mind that chloroform does sometimes kill at the heart. Reports of cases to the point are now and then seen in the medical journals, and not a few skilled practitioners are in the habit of saying that they have seen chloroform take the patient Lethe-bred through the circulatory instead of the respiratory chute. Indeed the matter seems not to have been settled to the entire satisfaction of His Highness, the Nyzam of Hyderabad himself, and it appears that he is about to spend more money in getting at the truth.

It should be a matter of pride to American physicians that one of their number has been invited to take part in the work, as the following letter shows:

Another Investigation of Chloroform.

Philadelphia, October 11, 1892.

Messrs. Editors: Having been asked to undertake a research at the expense of the Government of His Highness, the Nyzam of Hyderabad, India, with the object of reconciling, if possible, the conflicting views concerning the action of chloroform, I am anxious to receive from American physicians and surgeons records of any cases in which it was noticed that the heart stopped beating before respiration, or respiration stopped before the heart.

Notes concerning any such cases will be considered strictly confidential, provided the reporter states his desire that his name shall not be mentioned in the report of the research when it is finished. Otherwise due credit will be given for any information received.

H. A. Hare, M.D.
Jefferson Medical College, Philadelphia.

It is to be hoped that every doctor who may be in possession of facts bearing upon this vital question will lose no time in putting Dr. Hare in possession of them; but it is also to be hoped that the reporter will be sure of his ground in every case detailed. Few questions are of larger practical interest than the mode of death under chloroform, and while we are satisfied to camp with the respiratory-center men, we can not but admire the patience, perseverance, and munificence of the Indian Prince in his determination to sift the question to the bottom.

LA REVISTA MEDICO-QUIRURGICA.

We are pleased to acknowledge the receipt of a copy of "La Revista Medico-Quirurgica," edited by our old friend and pupil, Samuel E. Milliken, M. D., Lecturer on Surgery at the New York Polyclinic School and Hospital, etc., and Pedro J. Salicrup, M. D., Ex-Member of the Royal Sub-Delegation of Medicine and Surgery and of the Board of Health, San Juan, Puerto Rico, etc.

At first view it would seem improbable that even New York should be able to support so large a publication as "La Revista," containing nothing but articles written in the Spanish language; but when we remember that South and Central America, Mexico, and the West Indies send nearly all of their students to the United States to be graduated in medicine, we may confidently expect that the new venture in journalism will be crowned with success.

The Southern Surgical and Gynecological Association will hold its fifth annual meeting in the city of Louisville, Tuesday, Wednesday, and Thursday, November 15, 16, and 17, 1892, under the presidency of Dr. J. McF. Gaston, of Atlanta. Members of the medical profession are most cordially invited to attend. By order of the Council.

W. E. B. Davis, Secretary.
Notes and Queries.

Editor American Practitioner and News:

His First Case.—In conversation with a very wealthy young man the other day, he related an experience with a recent graduate on whom the odors of commencement-lay flowers and the dissecting-room were still fragrant. "While at my country place this summer I suffered severely with asthma. As you know, I have been under the treatment of doctors all over the world, and I know pretty well what will relieve me, and that is a hypodermic of morphine. My attacks always come on late at night, and of course I sent for the nearest doctor. The first visit is still pictured vividly before me now. There came a timid rap at the door, and on my impatient summons, 'For God's sake, come in,' the blushing, beardless medico turned the knob the wrong way several times and finally waited for the door to be opened. I feel sure this was his first call. There he stood hesitating whether to back out or not, but finally stumbled over the sill and fell into my presence. In bowing to my wife his glasses fell off, and in picking them up he turned over a small table with some valuable china. If I had not been so sick I would have assured the poor fellow, but you know how I am when suffering one of these attacks. As I lay there gasping for breath and wheezing like a tow-boat, he felt my pulse and asked about my bowels. My patience as well as my breath were about exhausted, and between gasps I yelled out—'D-n—it—sir—don't you—see—? Give me a hypo—dermic—. Give me a grain—quick.' Warm water was ready for him in a glass which was handed him, and with some encouragement from my wife he tried to load his syringe. The tablet would n't dissolve; it looked as if his thumb and his fingers would never fill the syringe, and when finally, after numerous efforts, he accomplished the task, I thought he would never get the needle through the skin. The needle left a large blotch, which lasted several days and was very painful. Still, everything to the contrary, I called him quite a number of times, and the last visit he paid was quite a contrast to the first. He came in gracefully, with self-assurance, and the needle didn't leave a blotch. I know that I have started him on the right road, and that mine was a valuable experience for him.

"To conclude, with the knowledge that I was rich he sent in a bill that would stagger some specialists, which I paid without a murmur."

The Vibrio of Asiatic Cholera.—From the publication of Koch's application of the method of cultivating microbes on gelatine and other solid media, in order to effect their separation, dates the immense development of bacteriology that has occurred in recent years. Before this time no one, unless he had the genius of a Lister or a Pasteur, could hope to obtain valuable results. Since then any one who has a sufficiency of perseverance has been able to make discoveries—if for no other reason, because he is in a position to discover his own mistakes. The method referred to is, in its general principles, simplicity itself. Its application to the discovery of the cholera microbe may roughly be described as follows: A minute trace of the rice-water contents of the intestine of a cholera patient is added to some meat jelly which has previously been liquefied by warming it to the temperature of the body. The mixture is poured out on to a glass plate and allowed to solidify. Each of the many microbes that was contained in the rice-water employed is thus fixed in position on the glass plate, and presumably at some distance from its neighbors. The glass plate is kept at the temperature of the room, and after a day or two each of the microbes will have developed, producing a cluster or colony that is clearly visible to the naked eye. Each colony will obviously consist of one species of microbe. The colonies produced by different kinds of microbes will vary in appearance, and often a microbe can be identified by the naked eye appearance of the colony it produces. In plate cultures made in this way Koch was able to identify and separate a microbe that was generally present in preponderating numbers, having characters which clearly defined it from other microbes, and that has since then become famous as the vibrio of Asiatic cholera.

At the time of its first discovery in 1883
this microbe was described as a slender bacillus. Only on his return to Europe, when superior means of observation were at his disposal, was he able to show that the form of his cholera bacillus differed from that of all other then known bacilli in being that of a curved and not a straight rod. Since then many other microbes have been described possessing this characteristic curved form, and they are now commonly placed in a separate genus with the designation vibrio. The name "vibrio cholera Asiaticae" has now replaced the older and somewhat inaccurate term "comma bacillus."

The members of the genus vibrio are extremely similar, and have frequently been confused with the cholera vibrio. Miller in 1884 described a vibrio found in the mouth of healthy individuals. The same microbe was also isolated by Klein and Lewis, and asserted to be identical with the cholera vibrio. Only a more minute examination of the characters of the latter served to show the distinctness of these two species of vibrio. In 1885 Finkler and Prior described another vibrio associated with European cholera, which was also at first supposed to be identical with Koch's vibrio. The vibrio found in 1885 by Deneke in old cheese and the vibrio Metschnikovi, described by Gamaleia in 1889, are other members of this genus. The cholera vibrio is distinguished by the appearance of its growth in gelatine and by various biological characters. Among these may be mentioned the production of the so-called "cholera red." In 1885 Brieger observed that, on addition of a mineral acid to a cholera growth in gelatine, a red color is produced which at the time was considered to be characteristic of the cholera vibrio. Since then many other microbes have been found to exert this action, and the color has turned out to be merely due to a simple indol reaction. But this color can be obtained with greater intensity and sooner after inoculation of the culture with the vibrio of cholera than with other members of the genus.

A very interesting character of the cholera vibrio is its nitrifying power. Frankland, in this country, and Wynogradsky, in France, have recently described certain minute bacilli or cocci which are found in the soil, and which possess the power of oxidizing ammonia to nitrates. These nitrifying bacilli no doubt play an important part in rendering the soil fit for the growth of plants. The possession of this power by the cholera vibrio may be regarded as an indication of its fitness to exist in the soil, and thus to lead a non-parasitic mode of existence. The other species of vibrio only possess this nitrifying power to a very slight extent.

For some time after the discovery of the cholera vibrio an almost uniform failure attended the many efforts that were made to reproduce by its means a choleraiform disease in animals. The belief arose that the cholera microbe, like the microbes of leprosy, etc., was exclusively pathogenic to human beings. But in 1885, Koch, Ermengem, Doyen, Nicati, and Rietsch, succeeded in producing by means of it a disease in guinea-pigs after the general health of these animals had first been lowered by the administration of opium, alcohol, or other substances.

It is only recently that Gamaleia and Haffkine, working independently and by different methods, have succeeded in producing a true cholera in dogs and rabbits—not by first lowering the resistance power of the animal, but by the employment of a culture of the cholera vibrio that has been artificially increased in virulence. Perhaps methods similar to those employed by the above-mentioned savants may in the future enable us to reproduce in animals typhoid and other diseases which hitherto have been the exclusive and unwelcome property of suffering humanity. Such experiments would have a more than purely scientific interest, for they would open up the possibility of the production of protective vaccines which could be used for the benefit of mankind.

Already the discovery of methods of transmitting cholera to animals has led to the discovery of different methods of protective inoculation against the disease. It would be strange, indeed, if none of the very dissimilar methods of producing immunity against cholera employed by Brieger, Kitasato, Wassermann, Klemperer, Gamaleia, and Haffkine should turn out to be applicable to human beings. Cunningham, it will be remembered, who
had extended opportunities of making observations on cholera patients, has come to conclusions which widely differ from those of other bacteriologists. Instead of one cholera vibrio, he finds that there are ten or a dozen different varieties. He finds that they show considerable differences in their mode of growth on different media, and that these varieties remain constant when taken from one culture tube to another. For such reasons he thinks that these varieties should be regarded as distinct species. It is not reasonable to suppose that cholera is caused by a dozen distinct species of microbe. It may be due to none of them. There is no reason for thinking that any one of the dozen species is more likely than another to be the chosen vessel of wrath, therefore it is probable that none of them is worthy of this distinction.

Unfortunately the validity of this argument depends on a negative result, and in no science are negative results more untrustworthy than in bacteriology. Dr. Cunningham has failed to change one variety into another, therefore he argues they are separate species. He does not even seem to have attempted to produce this change by any of the many methods that seem likely to lead to such a result. For such reasons Dr. Cunningham's negative results are of no value beside the positive results of those authors who have succeeded in producing a choleraiform disease in animals by means of the cholera microbe. More than one of the members of the genus vibrio is known to be variable in appearance even to a greater degree than the diphtheria bacillus, and it is no wonder if more or less permanent varieties of the cholera microbe should occur in nature.

The question of how the cholera microbe manages to escape the action of the acid of the gastric juice is now in our opinion of primary clinical importance. We should, therefore, like to refer our readers to an interesting paper by Professor Matthew Hay, which was published in the British Medical Journal some years ago. Professor Hay shows that the reaction of the empty stomach in cats is alkaline, and that considerable quantities of liquid can be swallowed without any change in its reaction. Only solid foods can furnish the stimulus necessary for the acid secretion.

Ewald has made similar experiments in man by removing portions of a previously swallowed liquid at intervals by means of a stomach tube. He thus found that the liquid had a neutral or alkaline reaction so long as it remained in the stomach. Obviously, then, under such conditions the cholera microbe might readily pass through the stomach unharmed. The moral to be drawn from such experiments is that it is well during a cholera epidemic to avoid drinks between meals. These experiments while strongly favoring the use of acid drinks as a preventive of cholera and in the treatment of the preliminary diarrheal and earlier stages of choleraic infection, as urged by Mr. Ernest Hart in his recent addresses, may also perhaps be regarded as a justification of a belief prevalent among the laity that one should not venture with an empty stomach into the neighborhood of infectious cases. It is unfortunate perhaps that this side of the question did not present itself to the minds of those who drew the rather feeble memorandum issued this week by the London College of Physicians.—British Medical Journal.

The Administration of Anesthetics.—In the Birmingham Medical Review for May, 1892, Dr. George Heaton continues an interesting article, which he has contributed to several numbers of this journal, upon the subject of anesthetics. Speaking of the various measures used for the resuscitation of the patient, he says:

The galvanic battery might also be of service, but of course is rarely at hand when needed; the danger occurs when least expected. After the patient has rallied it is a wise practice to postpone the operation, if possible, until a future day, rather than to continue the administration of the anesthetic. After the balance has once been upset the patient is not usually in a fit state for any operative procedure, and the anesthetist is as a rule somewhat unnerved for the time.

Ether, like all other stimulants, when taken in excessive quantities, acts as a cardiac depressant, and this is the only way in which it can affect that organ for evil. The most common mistake beginners make when giving ether
is to forget to lessen the proportion of ether when full anesthesia is established. They continue to make their patients respire an atmosphere as highly charged with its vapors as when getting them under its influence. It is surprising how very little ether will often suffice to keep a patient well under its influence toward the close of an operation, and this small quantity will always postpone vomiting until the operation is completed. The chief difficulty in administering ether that may arise is with the re-piration. The respiratory mucous membrane of some patients is so sensitive that unless the ether be given highly diluted, with extreme regularity, so much irritative cough is set up, and so much mucus is secreted, that the patient runs a risk of being asphyxiated. In such cases chloroform should be substituted.

The normal state of the pupil in anesthesia deep enough for surgical purposes is a contracted one, in which it has not lost its reaction to light. Any dilatation which occurs is as a rule a herald of returning consciousness, of vomiting, or of dangerous syncope. But during ether anesthesia, though contraction of the pupil is the rule, yet it is a rule to which there are frequent exceptions, and the behavior of the pupil is not so sure a guide.

I would here utter a mild protest against the practice one so often sees of constantly flicking the conjunctiva, with a view of ascertaining if complete anesthesia exists. Besides often causing some slight conjunctivitis afterward from the irritation, it is no sure guide toward the close of an operation, for the anesthetic vapor by its local influence, and the repeated contact of the finger mechanically, have combined to render the conjunctiva insensitive, while the rest of the body may be any thing but insensitive to pain.

Except for its unpleasantness, the after-sickness of anesthesia, when not severe, is not an unmixed evil. It effectually aids in the elimination of the anesthetic from the system, and so hastens the return of consciousness. Such sickness is quite as common, and perhaps even commoner, after ether than after chloroform; but in my experience, one never meets with the violent, prolonged, and even dangerous vomiting after ether that occasionally, though happily but rarely, follows the use of chloroform. The main principle in the treatment of vomiting after anesthesia is to give the stomach complete mechanical and physiological rest. Nothing whatever should be given by the mouth till it has ceased, alimentation, if necessary, being carried on by the rectum. A small morphone hypodermic with a mustard-leaf applied to the epigastrium are of most service in obstinate cases.

At present instruction in anesthetic-giving is altogether outside the ordinary medical curriculum. It is given in some schools, but in others students are left to learn it how they can. In fact, some authorities even go so far as to say that students should never be allowed, even under supervision, to administer anesthetics.

In many places the notion is gaining ground that any one can give an anesthetic, and Heaton has heard a dresser, while being coached in giving chloroform by his surgeon, instructed to place a towel tightly over the patient's face, to withdraw the stopper of the chloroform bottle and allow the chloroform to drop on the towel until he is under. "A little such learning is a dangerous thing," and the light and airy manner in which one occasionally sees the self-taught student anesthetist proceed about his work would be amusing did not one foresee the fright he will soon inevitably experience when he has his first bad case.

It is considered of the utmost importance that every student should have paid his guinea for instruction and initiation into the mysterious rites of the vaccination art, and yet any one may go out into the world fully qualified, without ever having read a word about anesthetic-giving or having ever touched a chloroform bottle.

Heaton would have every medical school set classes for instruction, followed by examination in the subject, and a certificate of having personally given a certain number of anesthetics (of course under reliable supervision), presented by each student with his other certificates, when he enters for his final examination for qualification.—The Therapeutic Gazette.
Sanitary Verse.—At a recent meeting of the New York Sanitary Association, to the astonishment and delight of the many venerable physicians and other medical lights assembled, Dr. Edson read a poem, incidentally, on typhoid fever, composed by President Bayless, of the Health Board. It was entitled, “The Old Oaken Bucket,” as revised and edited by a sanitarian:

With what anguish of mind I remember my childhood,
Recalled in the light of a knowledge since gained,
The malarious farm, the wet fungus-grown wildwood,
The chillis then contracted that since have remained;
The sewer-covered duck-pond, the pig-sty close by it,
The ditch where the sour-smelling house drainage fell—
The damp, shaded dwelling, the foul barnyard nigh it,
But worse than all else was that terrible well,
And the old oaken bucket, the mold-erusted bucket,
The moss covered bucket that hung in the well.

(Tremendous applause.)

Just think of it! Moss on the vessel that lifted
The water I drank in the days called to mind,
Ere I knew what professors or scientists gifted
In the waters of wells by analysis find;
The rotting wood fiber, the oxide of iron,
The slime, the frog of unusual size.
The water impure as the verses of Byron,
Are things I remember with tears in my eyes.
And to tell the sad truth, though I shudder to tell it,
I considered that water uncomonribly clear,
And often at noon when I went there to drink it
I enjoyed it as much as I now enjoy beer.

(Laughter and cheers.)

How.addent I seized it with hands that were grimy,
And quick to the mud covered bottom it fell,
Then recking with nitrates and nitrates, and slimy
With matter organic, it rose from the well.
Oh, had I but realized in time to avoid them
The dangers that lurked in that pestilential draught,
I’d have tested for organic germs and destroyed them
With potassic permanganate ere I quaffed
Or, perseverance, I’ve boiled it and afterward strained it
Through filters of charcoal and gravel combined;
Or, after distilling, condensed and regained it
In potable form, with its filth left behind.
For little knew I of the dread typhoid fever
Which lurked in the water I ventured to drink;
But since I’ve become a devoted believer
In the teachings of science, I shudder to think.
And now, far removed for the scene I’m describing,
The story for warning to others I tell,
As memory reverts to my youthful indulging
And I gaz at the thought of that horrible well,
And the old oaken bucket, the fungus-grown bucket;
In fact, the slip-bucket, that hung in the well.

Further animated discussion followed, and the meeting adjourned without bloodshed.

The Doctor’s Temptations.—The pitfalls which the devil places in the path of the young medical practitioner are many, and it behooves him to keep ever humming that good old Methodist hymn, “Yield not to temptation.”

Dazzled in early youth by the stylish equipage, the beautiful residence, the elegant offices, the wealth, the honors, and the high-sounding titles of Dr. Sapomollis, the able and energetic Professor of How-to-get-practice in the leading medical school, he may have chosen the profession of medicine as a bee-line to worldly success; but he soon has impressed on him the unselenishness of its votaries, and by daily association with his teachers the new-kindled all-for-the-good-of-humanity self-sacrificing ambition’s faint and flickering spark is fanned into an all-consuming flame, and after graduating, it may be at the head of his class, he hangs out his shingle and sits down in his office with vainglorious notions of the physician’s noble calling, waiting patiently for the opportunity to exercise his humane benevolence. But day succeeds day, and week follows upon week, nay, months may roll by, and yet the poor suffering creature whose pain he so longs to alleviate cometh not. One of his neighbors’ children is taken down with measles, but his classmate, Dr. Brazen, is called in, who, when a consultation is requested, suggests Dr. Sapomollis. At last the point is reached when he can no longer pay his washer-woman, the landlady threatens to evict him, the restaurant-keeper refuses him his twice-a-day chicory decoction and doughnuts, his watch is left at the “Uncle’s” for safe keeping, and sleeping on a wooden table with Gray’s Anatomy for pillow, and a few old newspapers for covering, his philanthropic arider is chilled; and if it were not that Drs. Sapomollis and Brazen might reap the golden harvest, he would plant typhoid bacilli in every well in town.

At this juncture a beautiful young woman “in trouble” comes with tears in her eyes and gold in her purse imploring him to help her. He wavers, but humming again to himself, “Yield not to temptation, for yielding is sin; each victory will help you some other to win,” he straightens himself up, and kindly but firmly says, “No,” and then, not having tasted food for forty-eight hours, sits down, shuts his eyes, and tries to imagine savory pieces of roast beef gliding down his esophagus by the aid of a cup of fragrant tea. But, what joy! Salvation at hand! The secretary of a lodge,
with nearly two hundred members, notifies him that he has been elected their physician at a salary of $2 per year for each family. Upon the strength of his wonderful luck the restaurant keeper even trusts him for a mutton chop and a cup of chicory decoction. Soon after he finds himself being constantly called, night and day, for even the slightest ailments, but in the ease of serious illness he is made to understand that if he were not paid by the year they would prefer some one else. Thus he has to swallow many insults, and soon loses self-respect.

As he has a chance to write many prescriptions, the lodge-druggist comes and offers him a large percentage if he will only order cheap drugs in eight- and twelve-ounce mixtures, well diluted, tablespoonful doses; and as he knows that he is not only inadequately paid for his services, but insulted in the bargain, he does not scruple to conspire to defraud those who have treated him so shabbily.

As outside patients begin to come in, they are also requested to go to the druggist indicated on the prescription, because he is "absolutely safe and reliable." From accepting percentage on prescriptions there is but a step to other methods of cheating, as calling trivial ailments by terror-inspiring names or performing needless operations. A physician who can persuade his patients that every sore-throat is diphtheria, every slight bronchitis consumption, and every case of summer diarrhea he is called on to treat, cholera, or a surgeon who can persuade every woman who has borne children that she has a lacerated cervix that must be sewed up, and that he is the only one who knows how to do it properly, will, it is easy to see, gain both fame and fees.

From systematized robbery to murder is hardly a step, and as the crime of homicide is well paid for, and detection difficult, the sympathetic or soft-hearted but impecunious practitioner needs both principle and fortitude to resist a woman's tears and gold.

The wildest tempter, however, is the greedy, unprincipled, oily, smooth-tongued, flattering society paper fiend, who comes to you with pictures and so-called biographical sketches of your former ideal, Dr. Sapomollis, Dr. Brazen, and all your other professional friends, and wants to write you up, but in truth will drag you down. Beware of him! — *Pacific Medical Journal.*

**The Patient's Consent Alone Necessary to the Performance of a Surgical Operation.**—If, after consultation, they deem it necessary, surgeons are justified in performing a surgical operation on a married woman with her consent whether her husband consents or not. And in an action for damages for alleged unskillfulness and negligence in performing such operation, which is alleged to have caused her death, the wife's consent to the particular operation performed will be presumed from her voluntary submission to it, and the burden is on the plaintiff to prove the contrary. And where the disease resulting in death was caused by the operation the surgeons are not liable if they performed the operation with the wife's consent, in a careful and skillful manner, in the belief that it was proper to be performed. In the case in which these points were decided it appears from the evidence at the trial that the deceased had been afflicted by the formation of a lump in her right breast. It was supposed at first to be a benign tumor, but was afterward found to be a cancer. The defendant, a regular physician, was present, and performed the operation by cutting off the entire right breast. The operation was performed on June 1st, and the death occurred on December 5th following, and was not attributed with any degree of certainty to the result of the surgical operation. Some portions of the evidence tend to prove that the wounds caused by the surgical instruments were entirely healed, and that death was caused by tubercular meningitis. The husband of the deceased, who was the plaintiff, relied upon the fact that although he expressed a willingness that there should be an operation for a tumor he did not consent to the excision of the cancer. He says that he told the physician that if the formation in the breast was a cancer he objected to its removal. The jury returned a verdict for the defendant physician, and on appeal the Supreme Court, on the question of the husband's consent, said: "His own testi-
mony that he assisted the physician in preparing to perform the operation, and though not in the room where it was performed was near at hand. He says that he supposed the medical men were operating for a tumor, and that he would not have consented to an operation for a cancer. There is evidence from which the jury may infer that the patient knew that the formation in her breast was a cancer. When the doctors came to the house she had already prepared herself to undergo the operation. If she consented to the operation, the doctors were justified in performing it, if, after consultation, they deemed it necessary for the preservation and prolongation of the patient’s life. Surely the law does not authorize the husband to say to his wife, ‘You shall die of the cancer; you can not be cured, and a surgical operation affording only temporary relief will result in expense.’ He had no right to withhold from his wife the medical assistance which her case might require.

“The consent of the wife, not that of the husband, was necessary. The professional men whom she called in and consulted, being possessed of skill and scientific knowledge, were the proper persons to determine what ought to be done. They could not of course compel her to submit to the operation; but if she voluntarily submitted to its performance her consent was presumed, unless she was the victim of a false and fraudulent misrepresentation, which is a material fact to be established by proof. Indeed, the party who allows a surgical operation to be performed is presumed to have employed the surgeon for that particular purpose.”

And continuing, the court says: “It was the duty of the professional men to exercise ordinary care and skill, and this being a duty imposed by law, it will be presumed that the operation was carefully and skillfully performed, in the absence of proof to the contrary. As all persons are supposed to have duly performed any duty imposed upon them, negligence can not be presumed, but must be affirmatively proved. This principle is especially applicable in suits against physicians and surgeons for injuries sustained by reason of alleged unskilful and careless treatment. The burden of proof is on the plaintiff to show a want of proper knowledge and skill.”—International Medical Magazine.

Disinfection of Diarrheal Discharges.

To physicians, nurses, etc.: At a meeting of the Board of Health of the Health Department of the city of New York, held on the 16th ult., the following preamble and resolution were adopted (Medical Record):

Whereas, The presence of cholera in this city and its relation to diarrheal diseases makes it extremely important that all diarrheal discharges be at once disinfected, as many cases of cholera take the form of mild diarrhea, but the discharges in those cases are as dangerous as from the severer types of the disease: therefore

Resolved, That physicians and nurses are respectfully requested to see that this recommendation is promptly carried out, in this way the great danger of spreading infection from unsuspected cases of cholera will be greatly lessened.

By order of the Board of Health.

EMMONS CLARK,
Secretary.

SPECIAL NOTICE.

In prescribing the products of Manufacturing Pharmacists, we should be guided to a great extent by the business standing of the manufacturers. No other house in the South or West has a better reputation for strict integrity than the Robinson-Petett Company, Louisville, Ky. We do not hesitate to recommend the preparations advertised by them in this journal.

Dyspepsia with Nervous Debility. — Invaluable.

Fluid hydastisi..................1 oz; Celerina (Rio)........................2 oz.
M. Sig. Teaspoonful before each meal.

R. W. St. Clair, M. D., Brooklyn, N. Y., says: I have used S. H. Kennedy’s Extract of Pinus Canadensis for two years, in a large practice, and so far have never failed in reaching the most happy results. One case of nasal catarrh, that resisted the best treatment of some of our best practitioners, came to me. I began with the Pinus Canadensis, and am pleased to say that the cure is absolute. In two cases of diphtheria I used Pinus Canadensis, I came to one half pint of water, with the best results. The membrane peeled off and no new formed. In leucorrhoea, gonorrhea, gleet, etc., it is all that is needed. I know of nothing to take its place. I prescribe it many times daily; as a rule, I do not advocate injections into the womb, but I have in cases of endometritis used the Pinus Canadensis (Kennedy’s always) with great satisfaction to myself and relief to my patients.
Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words; or his reader is sure to skip them; and in the plenteous possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—Ruskin.

**Original Articles.**

**TYPHOID FEVER: ITS ETIOLOGY, PATHOLOGY, AND TREATMENT.**

**BY J. FULTON PURDOM, M. D.**

The etiology of typhoid fever practically requires no discussion. That the disease is due to a specific micro-organism, the typhoid bacillus, is an accepted fact. The only difference of opinion relating to the etiology would arise with regard to the manner of attack made by the bacillus in the human body, and as to what tissue constitutes its field of action; and yet there seems but little ground for controversy on this point when we consider the fact that investigation has shown, almost from the beginning of the history of the disease, that all epidemics and most of the isolated cases can be traced to an infected water supply, which is conclusive that the bacillus must be swallowed; and in connection with this fact *post-mortem* does not show a constant lesion of the stomach, but has proven beyond question that inflammation and ulceration of the glands of the small intestine are the only characteristic lesions of typhoid fever. With these facts before us we unhesitatingly say the disease is due to the typhoid bacillus, which must be swallowed and pass beyond the stomach, and be taken up by the glands of the small intestine in an active state, and that the bacilli are powerless to produce the disease in any other way.

In the opinion of the writer, the greatest hindrance to a uniform and successful treat-

*Read at a meeting of the Jefferson County (Ky.) Medical Society, October 15, 1892. For discussion see page 302.
intestinal glands, upon some other principle than the immediate action of the bacilli. That the patient in typhoid fever is in a state of toxemia, due to some poison acting upon the nervous centers in common with the other tissues of the body, is conceded by all. Also that the toxine thus acting, which we prefer to call a ptomaine, is the necessary product resulting from the reproduction and growth of the typhoid bacillus, bearing as constant and uniform relation to the bacilli as alcohol does to the yeast plant in pure alcoholic fermentation, is perhaps believed by many men in the profession; but while all agree that the patient is intoxicated by a specific poison, and many believe the poison to consist in a toxine resulting from the growth of the bacillus increasing the pathological changes, yet we do not find a definite or detailed description of the nature of the pathology of typhoid fever from a biological standpoint that would form a basis upon which the therapeutist may rely in directing his remedies to arrest the growth of the bacillus.

The failure to find such an explanation of the pathology of the disease is the writer’s only excuse for this paper, and we would remark that we believe we fully appreciate the importance of the subject with which we are dealing, and are willing to repeat here what we have said on previous occasions, because of the importance of the subject. At the same time we realize that in the estimation of many men the subject is too common to be discussed, and in their opinion the pathology of typhoid fever is so thoroughly understood by the profession that it is not worthy of consideration; and yet the variety in treatment, with the high rate of mortality that follows, tells us there is something wanting, and the finger of science points to pathology as the way to the light. Scientific investigations indicate that we determine if possible all the factors at work in the pathological changes that are produced. Hence the necessity of inquiring whether or not the bacillus is alone the direct cause of all the changes that occur, or is it only the prime factor, having a particular field of action in which by its reproduction and growth is furnished a second factor which produces changes less characteristic.

Such we believe to be the conditions on which the pathological changes depend in typhoid fever.

First, we have the primary lesions in the intestinal glands, due entirely to the action of the bacillus, and in this tissue the bacilli furnish a second factor, a ptomaine which is diffused by absorption through the entire system, acting upon every tissue of the body. In the early history of the case the bacilli acting locally and the ptomaine systemically are the only factors at work; but after ulceration begins we may have the action of the bacteria of suppuration added to the local action of the bacilli, and we then have the products of necrosis absorbed, which add to the systemic effect of the ptomaine, and it is at this stage we may have a few of the many typhoid bacilli taken in through the lymph channels with the products of necrosis. Also at this period in the case emaciation is usually so rapid that we have added to the ptomaine the products of tissue waste, especially in its action upon the nervous centers. Ulceration that leads to hemorrhage and perforation we believe to be due to the action of the bacteria of suppuration engrafted upon that of the specific bacillus. Also the supplicative inflammation that may occur anywhere in the body, except in the intestinal lesions, is due to the bacteria of suppuration which have been absorbed from the ulcers in the intestinal glands, and are a complication in the true sense of the word, being no part of the specific element of the disease, but acting only through the pathological avenues produced by the specific bacilli and their ptomaine. Against the pathology as here defined we have arrayed the opinion of almost the entire medical world. Flint said, years ago, that the lesions in the intestinal canal no more constitute typhoid fever than the eruption constitutes smallpox, and his statement has been corroborated by almost all authorities.

But in favor of the opinions expressed in this paper we have a reasonable explanation of the entire clinical history, and our failures in treatment, with many indications pointing in this direction that are being constantly manifested through bacteriological investigation, which is sufficient to cause us to think even if it does
The disease, though necessarily mild in character, because of the limited number of bacilli in the gland, and a correspondingly small amount of ptomaine absorbed; yet when ulceration occurs even the single Peyer's patch is subject to all the dangers of the bacteria of suppuration, which may extend the ulceration through a vessel with fatal hemorrhage, or result in perforation with death from peritonitis. It also explains the non-characteristic suppurative inflammation which occurs in some cases, which, as before stated, is due to the absorption of the bacteria of suppuration from the ulcers in the intestinal glands. Inflammation and ulceration of the intestinal glands are alone characteristic of typhoid fever, because they are the only lesions directly due to the action of the specific bacillus. From this standpoint we can understand why the scientist has never been able to produce the disease except through their action in the intestinal glands.

Our failures in treatment find here a reasonable solution. Antipyretics have never produced a more favorable influence over the course and duration of the disease, because the elevated temperature is due to the action of the ptomaine furnished by the bacillus in the intestinal glands, and the antipyretic having no effect on the bacilli the production of the ptomaine continues, and its absorption is a necessary result. The more favorable influence of the cold-bath treatment over that of the internal administration of antipyretics is due to the fact that the latter have a more depressing effect upon the patient's vital forces, and the bath has a more stimulating effect through its action on the bacillus, which explains why the bath treatment has never reduced the per cent of mortality due to perforation. The failure of calomel either in large or small doses is plain when we remember the fact that mercury in any form affects perhaps any part of the glandular system more than it does the glands in the intestinal canal; hence we could not expect any specific action upon the bacilli even if calomel possessed such a property. Antiseptics that are absorbed by the stomach need no comment further than to say they never reach the bacillus, and can be of service only in so far as they improve the condition of the stomach for the

Not convert us. This view of the pathology shows why typhoid fever is insidious in its development, because the bacilli must first furnish a sufficient amount of ptomaine to produce a perceptible intoxication, or increase in numbers sufficiently to produce a diarrhea before the patient knows he is sick; explains our inability to abort the disease, gives a reason for the headache in the early history of the case, the headache with all the nervous symptoms which belong to the first week or ten days of the disease being produced by the action of the ptomaine on the nervous centers while sensibility is intact, and furnishes us an intelligent explanation why these symptoms are displaced, as the disease progresses, by other symptoms indicative of a greater degree of blood poisoning, which is produced by the additional action of the products of tissue waste resulting from the action of the ptomaine on all the tissues of the body; also we now have the absorption of the products of necrosis from the intestinal ulcers. It enables us to understand why the fever is self-limited, because the disease can exist as typhoid fever only so long as is required for the bacilli to use up the tissue in the glands affected. Relapses being due to the invasion of other glands that were not affected in the primary attack make plain why the infant and the aged have the disease less frequently than the young adults, because in the infant the glands are not developed, and in the aged they are atrophied; also why one attack renders the individual less likely to have the disease again, because the glands are more or less destroyed; also why the dejecta of the bowels are the only source of infection, because the bacilli are evolved from the glands back into the intestinal canal and ejected with the discharges. The diarrhea is nature's effort to eliminate the bacilli, hence the imperative necessity of immediate disinfection of the alvine discharges. The abundant perspiration is nature's effort to eliminate the ptomaine with some of the products of tissue waste.

A correct pathology gives us an intelligent idea of why a walking case of typhoid fever may die from perforation, or have a fatal hemorrhage, because the invasion of one Peyer's patch by the specific bacillus would constitute
reception of nourishment, and should be given with that view only.

We hold the opinion unqualified that there is no case of typhoid fever so mild as to render it devoid of danger, therefore the necessity for judicious treatment in every case of the disease. Whoever maintains that mild cases require no medicine certainly indicates that he holds no definite convictions of the pathology of the disease, or at least has no confidence in the action of remedies on the specific cause. The indications for treatment are clear.

First, an antiseptic which will neither be absorbed by the stomach nor have its antiseptic properties neutralized by the gastric juice, but is capable of being absorbed from the intestinal canal, that we may have its action upon the bacilli in the glands as well as upon those of the lumen of the bowel; and salol certainly approximates more nearly to the conditions here required than any other drug now before the profession.

Secondly, a drug less likely to be absorbed, given with a view to its antiseptic action on the contents of the bowel. Sulpho-carbolate of zinc we believe to be best adapted to this purpose, and it should be alternated with the salol. These drugs will seldom disturb any stomach. Salol may be given in capsule in doses of two to ten grains every two to four hours, according to the demands of the case. If alternated with the zinc salt, every four hours would be sufficiently often. The sulpho-carbolate of zinc may be given in pill, in doses of two to five grains every four hours, as indicated by the odor and frequency of the alvine discharges. The purposes to be accomplished by the two drugs as above mentioned we believe express their relative value in this disease.

Sub. nit. and salicylate of bismuth, naphthalin, naphthol, thallin, etc., are remedies of less value as intestinal antiseptics, though sub. nit. of bismuth combined with pepsin is often indicated to improve gastric digestion. From clinical observation we are fully satisfied that listerine in teaspoonful doses, repeated as required, improves the condition of the stomach for the reception of nourishment, and if all the listerine is not absorbed by the stomach it assists the action of the intestinal antiseptics.

We are willing to be regarded as a strong advocate of the use of a reasonable amount of alcoholic stimulants from the beginning of treatment, believing that alcohol being a diffusible stimulant, improves the assimilative functions and retards tissue waste by neutralizing to some extent the action of the ptomaine. The necessary amount of alcohol can be determined only by its effect. When given in excess it will necessarily disturb the action of the stomach, and to that degree hinder the nourishment of the patient. At all times before taking anything into the stomach the patient should rinse the mouth with equal parts of listerine and boiled water, or some other antiseptic solution, for it renders him more comfortable and keeps the stomach in better condition.

It is certainly desirable to make the diagnosis as early as possible that proper treatment may be instituted and improper treatment avoided, for there is often much harm done by the too free use of purgatives in the beginning of typhoid fever in those cases which present symptoms of malarial remittent. Fortunately the treatment here suggested is applicable to any stage of the disease, and no complication contra-indicates its employment, neither does its continuance debar the use of remedies required to meet the indications when complications arise.

Under this form of treatment it may become necessary to move the bowels, which should always be done by enema of simple warm water which has been previously boiled. To this add the necessary hygienic conditions of the patient, the bed, the room, the house, and all that pertains thereto. Feed the patient abundantly according to the well-established rules of feeding fevers, and we hope to see the mortality reduced to one per cent.

Louisville.

The last New York Legislature at the close of the session passed a law giving judges the power to commit women, if confirmed drunkards or addicted to excessive use of a narcotic drug, to a new private institution erected on the Hudson for the purpose.
ELECTRICAL ILLUMINATION OF THE BLADDER.*

BY W. R. BLUE, M. D.

The subject I bring to your notice to-day is one which, after lying in a quiescent state for a number of years (due to clumsy and poorly made instruments), has received a new impetus, and is one to-day in which our foreign brothers are very much interested. Only a few men on this side have given the subject the attention it so well deserves, and I trust this humble attempt of mine will be of some interest to you all.

I think it best to here describe the instrument that is used for illuminating the bladder. It is called the cystoscope, and as now made is a perfect instrument. There are two makes of this instrument, namely, Leiter and the Nitze. The former is considered the best, it being more practical. I will now describe the instrument roughly, as time will not admit of a perfect description. There are two forms of the cystoscope. In the first the window and light are on the concavity. This is intended for examination of the roof and sides of the bladder. It can be used, however, for examining the entire viscus by a rotary motion. The second instrument is the Brenner modification of the Nitze-Leiter instrument. The window and light are on the convexity, elbow and beak. The Brenner modification consists of a small tube soldered on to the shaft of the instrument which terminates just below the window. This modification serves three purposes: First, for catheterizing the ureters when practicable (in the female, Dr. Brenner has successfully catheterized both ureters, but he has failed in the male); second, for changing the solution in the bladder without removing the instrument; third, by directing a jet of water or boric solution against a small growth we are able to ascertain by the amount of motion or oscillation thus communicated to the body whether we have a pedunculated or sessile growth to deal with—the most important element in deciding our future treatment. The instrument has the form of a calyx and sound of twenty-one French gauge, with an elbow and beak. Both instruments are made up of three sections: First, the beak which carries the electric lamp; second, the body or shaft which contains the telescope which increases the size of the image refracted through the window prism, and conveys the insulated wire from the battery to the lamp; third, the ocular end which is furnished with screws for the battery connection. But little need be said of the battery. The one I have is portable. It is made by Leiter, of Vienna, and contains six cells of zinc and carbon inclosed in a hard rubber case. The fluid used is the chrom-sulphuric, which you are all familiar with. The solution used to distend the bladder may be either a saturated solution of boric acid or sterilized distilled water, or, as Mr. Fenwick prefers, normal urine, should the bladder happen to contain a sufficient quantity. At St. Peter's Hospital, in London, boric solution is used. Grunfeld, of Vienna, prefers sterilized distilled water. I prefer the boric solution on account of its antiseptic properties, should the bladder become injured in any way by manipulation of the instruments, which is fortunately a very rare occurrence.

Value of the Electric Cystoscope. The value of the electric cystoscope may be estimated in various ways. The instrument may either afford us a clearer insight into pathological conditions of the bladder mucous membrane, and enable us to watch the progress of the disease and the behavior of the same under varying forms of treatment, or it may allow us to control our clinical observation and speculations by direct visual research, and rightly to assign the more prominent symptoms to definite causes; or, finally, it may at once elucidate for us the cause of obscure symptoms of urinary disease, of which we could otherwise obtain no certain clue without a cutting operation. The following I quote from Mr. Fenwick's excellent work on Electrical Illumination of the Bladder and Urethra:

"Pathological Conditions of the Living Bladder as seen by Electrical Illumination:

"Acute Cystitis. This has been well investigated by Dr. Finger, of Vienna, who restricted his examination to gonorrhreal cystitis. The appearance according to that observer is as follows. The mucous membrane in proportion to
the extent and intensity of the process is more or less infected. It is especially changed at the neck of the bladder. This turgescence is either marked with greatly dilated vessels, or in very acute cases it is printed with hemorrhagic spots, streaks, and blotches, or it appears of a uniform red color. The epithelium is either collected in lumps or is in long thready streamers, which float in the contents of the viscera. Acute cystitis of other origin has about the same appearance."

**Chronic Cystitis.** The cystoscopic appearance of chronic cystitis depends largely upon the degree of the attending inflammation. If slight, the mucous membrane is strikingly white and gelatinous looking. Its thickness as measured by the rugae is increased. The anastomosing vessels are absent, while here and there lumps and streamers of mucopurulent are observed attached to the surface.

**Tuberculous Disease of Bladder.** The cystoscope definitely localizes a tubercular lesion, and indicates the utility or inutility of a suprapubic cystotomy in order to scrape out the deposits.

**Foreign Bodies.** Fillenbaum's case stands first in the literature. It is as follows: Herr Franz R., age fifty-four, had tabetic atony of the bladder for some years, and was in the habit of relieving himself with a Nélaton catheter. He was awakened one night by a call to micturition. He passed the catheter in the dark, and evacuated the bladder. Thereupon he must have fallen asleep without withdrawing the instrument, for on awakening he found to his horror that the instrument was nowhere to be found. A diligent but fruitless search was made, and as he suffered no inconvenience his story was doubted by his attendants. A thorough examination with sound and lithotrite failed to reveal it. On the following day a cystoscope was used, and there came into view a symmetrical, elongated yellowish body, which was the catheter, covered with a yellow urinary deposit. There are many other cases similar to this where, after careful search with sound and lithotrite, the cystoscope has revealed the object sought.

**Calculi.** Calculi often form very pretty objects under the electric light. They are readily diagnosed, and that without the manipulation which is often needed to demonstrate their presence with a sound. They usually appear as brownish or whitish marble-like bodies resting on the bladder base, and throwing a double shadow on the subjacent mucous membrane. Dr. Nitze thus describes a case which he demonstrated to Prof. Von Bergmann: Directly the prism had penetrated the bladder one perceived a group of stones with faceted surfaces, like piled-up chalk blocks. The rotation of the cystoscope slowly on its axis caused the picture to be changed like a kaleidoscopic view. Two large lumps built together a gate-way opening through which the mucous membrane could be seen, but at the next moment there was a sudden downfall, and finally one stone dropped across the prism and seemingly plunged the bladder into darkness.

**Encysted Stone.** Schustler reports a case of a man, age sixty-eight, suffering from hypertrophy of the prostate and the presence of a large soft vesicle calculus. On attempting to remove the stone with forceeps, after lateral lithotomy, it broke into pieces, and the fragments were removed piecemeal. Subsequently stones were found from time to time by means of sound, and were removed through the perineal wound. Despite of four months' thorough treatment the bladder symptoms remained unabated, and the cystoscope was therefore introduced. This examination showed, to the surprise of all who had watched the case, the presence of a stone which was confined in a diverticulum deep in the base of the bladder, and which projected but a slight way out of the mouth of the sack.

**Growth of the Bladder.** Growth of the bladder as seen by the electric light often form objects which Dittel has justly designated as truly charming. More especially worthy of his praise are certain forms of villous papilomata; those whose long and delicately-branched leafy processes, rose red in color from their capillary blood, float freely about in vesicle water, trembling with every movement of the beak of the cystoscope, swaying at every eddying rush of the ureter streams. The entire picture is like some small aquarium, with an attached sea anemone moving its delicate tentacles.
TYPHOID FEVER: ITS ETIOLOGY, PATHOLOGY, AND TREATMENT.*

BY J. W. DRAKE, M. D.

Dr. Hutchinson classes the etiology of typhoid fever under two heads, predisposing and exciting causes, though the illustration of its predisposition proves that there is really no predisposing cause. All observers have agreed that the predisposition of typhoid fever is greater in childhood and early adult life than after thirty years of age; and while it has been generally supposed that very young children were exceptionally free from it, Manzini has recorded a case with lesions of Peyer's patches similar to typhoid in a fetus of seven months, which died a few hours after birth. Other cases are on record where children have died a few weeks after birth with this disease. On the other hand, it frequently occurs in advanced age. I have two cases now, one fifty-one and the other sixty-five years of age. If we consider how much greater is the number of persons under than over thirty years that are susceptible to the disease, there will perhaps be no predisposing cause in early life. The statistics of most hospitals show a predominance of males over females among the typhoid patients; but, again, the proportion of men who apply to hospitals is much greater than that of women. There is no evidence that the occupation or station in life acts as a predisposing cause. It attacks the banker at his desk at about the same ratio as the mechanic at his bench. Persons in ill health seem to be no more liable to be attacked by typhoid fever than the strong; in fact Liebermeister seems to think that it attacks the strong and healthy by preference, and avoids those suffering with chronic disease. Typhoid fever occurs more frequently at this season of the year than at any other, from which fact it has derived the name of autumnal fever. Why this is true we are unable to account, as it is most generally agreed that the exciting cause is produced by the contamination of food, drinking-water or air, which is as liable to occur at one season as another.

To go into a lengthy discussion of the exciting causes of this disease would be an infliction of unjust punishment upon the Society, as we are all familiar with the many illustrations of the well and cess-pool, the leakage of the sewer-pipe or the discharge from the patients finding its way into the drinking-water, etc. I believe thoroughly that the poison finds its way into the system through the alimentary canal, and that it never passes through the lungs. If the atmosphere does become contaminated and is inhaled, the poison lodges upon the fauces and is swallowed. Many of the profession at one time considered typhoid fever very contagious, and asserted that it was as much so as measles or smallpox. At the present time, however, the larger majority of physicians, whose opportunity for observation gives weight to their opinions, do not regard the disease as contagious. Liebermeister asserts that he has never seen a case to occur from direct contagion. The specific poison of typhoid fever is believed to be a micro-organism named by Klebs the "bacillus typhosus." This germ swallowed into the system attacks the glands of the intestines, causing, first, infiltration, second, the stage of congestion, third, that of ulceration, and fourth, the stage cicatrization; each stage occupying the space of about one week, and corresponding to certain periods of the disease.

The absorption of these germs into the blood causes the so-called constitutional manifestations of the localized trouble, for I firmly believe that typhoid fever in its first stages is a local disease, with constitutional symptoms, due to the presence of the poison in the blood; so also the suppuration occurring in different parts of the body, as complications or sequelae, are very probably due to this secondary infection of the system.

The room of a typhoid patient should, if possible, be located on the second floor of the building, should be well ventilated, without draught on the patient, and so secluded that...
the noise of the outside world can not disturb the sick. Visitors must be excluded, and the room kept perfectly quiet and in charge of an efficient nurse. The diet should be restricted to liquids, such as milk, chicken and mutton broths, beef tea, and the like. The beef tea makes too much heat in the febrile stage, but acts well in convalescence, as it is somewhat laxative to the bowels. Milk, in my judgment, is par-excellent to all other foods, and the addition of a little peroxide of hydrogen will prevent the formation of tough curds in the stomach. If I can succeed in getting my patient to take from two to four pints daily, I feel that he is well nourished, and that he will require but little stimulation. If, however, stimulants are needed, I prefer some reliable brand of whisky, giving it as the indications require.

The early symptoms of typhoid being very indefinite in character and decidedly that of remittent, I begin treatment by giving something to thoroughly arouse the secretions, favoring calomel, podophyllin, and bicarb. of soda, and repeat the dose every three hours until a free movement is obtained. If at this time I am more strongly convinced of the typhoid character, I give from twenty-five to thirty grains of quinine (usually at one dose) for two or three days, then stop it altogether. By giving quinine in full doses we get rid of the malarial poisoning, which might otherwise form a serious obstacle. To control the temperature I give some of the antipyretics, favoring antipyrin; a good combination is:

Antipyrine ........................ 40 grains;
Bromidia ........................ 1 ounce;
Papine ............................. 2 ounces;
Aqua, q.s. ........................ 2 ounces.

M. Sig: Dessertspoonful every two or three hours until thermometer registers 100° F, and repeat, when temperature rises to 102.5°.

This will control the fever nicely; besides it quiets the nervous system, relieves headache, if any be present, and makes the patient comfortable. I am aware that many object to any of the coaltar derivatives on account of their depressing effects upon the heart, but I have never seen any bad effects from the above dose. I employ the sponge bath with a little spirits added to the water, which is very refreshing to the patient; repeat two or three times daily.

If diarrhea becomes troublesome, I have had no difficulty in controlling it with opium, bismuth, and acetate of lead, or by enemas of laudanum. For constipation I prescribe elixir purgaus (Lilly), a dessertspoonful every three hours, as required. Intestinal hemorrhage is best controlled by perfect quiet, opium, and ergotine.

If there is much tympanitis, poultices with straps of sweet oil and turpentine should be used.

Having spoken thus briefly of the care of the symptoms in typhoid fever, I wish to call attention to what I believe to be a specific course of treatment, and that should be administered in every case, no matter whether it be mild or severe; not that the disease is very materially shortened or aborted (I believe that most of the so-called cases of abortive typhoid are a mistaken diagnosis), but the severity of the attack is lessened, and the disease runs a mild course, with convalescence established at from the fourteenth to the twenty first day.

Having at the beginning briefly noticed the poison and its effects upon the system, let us for a moment consider the contents of the intestines. The digestive fluid having been dried up by the fever, we find undigested food, vitiated secretions, dead and dying tissues, and the whole forming a mass of decomposing matter in which the typhoid bacillus and other germs abound. Here is certainly an indication for the employment of antiseptics, the purpose being to destroy the micro-organisms and prevent their absorption into the blood, which I believe, if pushed, will lessen the mortality of this grave disease very materially. Just which of the drugs under this class is best adapted is an open question; many have been advocated, among the late the might be mentioned salol, resorcin, naphthol, and the sulpho carbonate of zinc. This last was first made prominent by Dr. Wangh, of Philadelphia, which, he says, is singularly free from objectionable qualities, and which can not be said of most other antiseptics.

He, however, says that constipation generally follows its administration, which to my mind is objectionable, as we can not get thorough antisepsis without a regular movement of the bowels. Without going into further discussion
of the merits or demerits of the above-named drugs, I wish to call attention to the use of 
baptisia tinctoria; it is known to possess very 
strong antiseptic properties, and can be borne 
by the stomach in almost any sized dose, and for 
any length of time. I have used it in quite a 
number of cases, and with the most happy re-
results; it acts not like the zinc, but as a gentle 
taxative and stimulant to the bowels, thereby 
insuring its good results. My rule is to pre-
scribe ten drops of Lloyd's baptisia every four 
hours, and continue it all through the attack 
until convalescence is well established. Under 
its use the temperature falls within a few days to 
100° to 101° F., after which I have found 
no antipyretics needed. The tympanites disap-
ppears, the headache ceases, and I have never 
seen a hemorrhage where it was used. 

LOUISVILLE.

Societies.

THE LOUISVILLE SURGICAL SOCIETY.*

Stated Meeting, September 12, 1892, A. M. Car-
tridge, M. D., President, in the chair.

Dr. I. N. Bloom: I exhibit this patient to 
illustrate a point that has been very much 
misunderstood, at least the syphilide has been 
called by various names. There seems to have 
been a great deal of confusion between the 
forms of syphilis known as serpiginous and tu-
berculous. There is really no such thing as a 
tuberculous syphilide. The term is applied to 
a form rarely met with, a type of which is 
shown in Kaposi's atlas. This patient gives 
the history of syphilitic trouble of three or 
four year's standing. The infiltration all around 
the orifice of the anus and perineum is that of 
condylomata lata.

No. 2. This little colored girl came to me on 
the second day of August last, and I made 
diagnosis immediately after seeing the lesion 
on the cheek; it has since been confirmed. 
When she consulted me there was this indura-
tion which you see on the cheek, and a few en-
larged glands on the neck, nothing else. I 
made diagnosis of syphilis from the initial 
lesion on this cheek. She gave the history that 
some time before she had a fight with another 
colored girl and was bitten on the cheek. I 
gave her powdered chalk, bread pills, and 
other things to hold her, continuing this treat-
ment for three weeks, when the eruption ap-
ppeared on her body, making the diagnosis 
absolutely certain. She was not put upon 
specific treatment until after the eruption ap-
ppeared. The date of her altercation preceded 
the appearance of the local lesion about four 
weeks, or two months before I saw her. It 
would be an interesting case if we could make 
an examination of the woman who bit this 
girl; I doubt not we would find decided evid-
ences of buccal syphilide. We made every 
effort, but could not find her assailant. This 
is the first chancre that I have ever seen on the 
cheek, but they have been reported not infre-
quently. There is still considerable enlarge-
ment of the glands of the neck, but the indu-
rated of the cheek has grown less and less 
since she first commenced specific treatment, a 
little less than a month ago. There has been 
no enlargement of the glands in the groin.

It seems to me this is a perfectly clear case 
of syphilitic lesion. Girl, eighteen years of age; 
otherwise seemingly in excellent health; does 
not claim to have been virtuous, but as far as 
she knows has not been exposed to any disease 
through coitus. There appears some time after 
a bite a sore on her cheek, which is a painless, 
indurated, non-ulcerative enlargement, and in 
addition to this a very great induration of the 
glands of the neck. I am consulted two 
months after she was bitten, and in three 
weeks send her to the hospital, at which time 
the enlargement of the glands and the syph-
ilide on the cheek were twice as large as they 
are at the present time. The glands on the 
neck were enormous, so large that you could 
see them as far as you could distinguish her 
features, on both sides of the neck, but larger 
on the side on which the chancre appears on 
the cheek. Before being sent to the hospital 
she came to see me every two or three days, 
and I was constantly watching for an outbreak 
on the body. I attended her at the hospital. 
I told her that such a breaking-out would occur 
eventually, and it did occur. It was followed 
by scabby sores on the head and condylomata.
upon the genitals, both larger labia being involved. This condition of things led me to put her upon specific treatment, which has caused a disappearance of the indurated condition to a great extent. The history, it would seem to me, excludes any thing else but syphilis, and makes it as clear a case as is possible, without confrontation.

Dr. J. G. Cecil: I can not but agree with Dr. Bloom in his diagnosis of this case. I think, according to his statements, there can be no reasonable doubt about it. I should be very much pleased if we could get hold of the other party in the case.

Dr. E. B. Palmer: I really do not know that I have any thing to say regarding the case (second case exhibited by Dr. Bloom). The condition of the local sore now is absolutely negative. In the local sore I can not conceive any feature of syphilis, either early or late, so far as any initial lesion is concerned, but the woman is undoubtedly syphilitic. I see few colored people, but of course they are often seen by Dr. Bloom in his hospital service. The condition of the glandular enlargement is such that this alone would not justify any thing in the diagnosis of syphilis. Except for my entire confidence in Dr. Bloom's ability to make a diagnosis, I would not be prepared to say that the scar on the cheek was a chancre, but I recognize the extreme possibility of the occurrence of chancre anywhere where the infection might be applied, and, in view of the history of the case, I think there is no reasonable doubt but that is the initial lesion. The mastoid glands are not enlarged upon either side as far as I can determine now. In fact the case is a little too far along to make any positive diagnosis, except on the history. Dr. Bloom's history of the case I think makes it perfectly clear that the initial lesion occurred at that point (on the cheek), but I must say that in the sore, as I see it now, there is no physical evidence of its being a chancre. We all know the tendency to strumous trouble in colored people, and their liability to symmetrical adenitis. While this patient has shown secondary manifestations for three months, and been under treatment, no doctor has the right to say that it is or is not syphilis just from the case as it presents to-day. I think the day is not far distant when syphilis will be taken from the class known as venereal diseases.

Dr. Bloom: I think it all points to infection of recent date.

Dr. Palmer: It is unquestionably infection of recent date. I think I can quote Dr. Bloom when I say that it is exceedingly hard to find a vaginal initial lesion. Dr. Bloom has shown me one or two cases of local vaginal lesion, and Dr. Bullock brought in a case some time ago with a chancre on the labium minus. It is exceedingly hard to find the local lesion in the female.

Dr. Bloom: I want to indorse what Dr. Palmer has said, that in the woman you often find evidences of recent syphilis where there is no evidence of the initial lesion. As a case in point, I will mention a girl whose history I knew very well, knew also that she had not led a virtuous life. A man had been sent to me suffering with iritis; he had been treated, but received no benefit; he denied absolutely having had a sore of any kind. Upon examination (he having come directly from the oculist) I found a few scabs in the hair; found a syphilitic on his body; found a mucous patch in the corner of his lip; he had this iritis and a universal glandular enlargement. He told me that he had had no intercourse with any woman, except one, since Easter day. In my absence my assistant examined the girl, and found absolutely nothing. Not knowing who the girl was, and feeling, as I suppose all doctors do, that they are not thoroughly satisfied unless they make an examination themselves, I requested this man to bring the girl to my office that I might make a personal examination. This was done, and much to my surprise I found it was the girl above referred to, who I knew very well. I made a thorough examination, and could find no trace of syphilis of any kind whatever. The man had no chancre as far as I knew, but he had unmistakable evidences of syphilis. I do not know where the syphilitic virus entered, but there was no doubt as to the presence of syphilis. Another case I recall came to me with diagnosis of cancer of the tongue, and yielded promptly to six months' mixed treatment—that is, all traces of it dis-
appeared. In this case there was absolutely no history of chancre, but it was unquestionably syphils.

Dr. Anderson will remember a case that I sent to him on one occasion, a young man. I made the diagnosis of syphils. There was absolutely no history of chancre, yet I know it was syphilitic trouble. The man died of typhoid fever about six months after Dr. Anderson saw him. I do not doubt that there are many men who are perfectly honest in saying that they have never had a sore, yet there are unmistakable evidences of their having syphils. In women I believe that more chancrees are overlooked than discovered.

In the second case reported by me I think the sore is a typical induration, and can only be attributable to one cause, syphils. I think a chancre can be of the Hunterian type on the cheek as well as on the penis. Concerning the enlarged glands of the neck, we would naturally expect a greater enlargement on the side on which the chancre is situated. Glandular enlargement is produced through the lymphatic system, and I believe if Dr. Palmer will think a moment he will remember a case we saw together having a very severe chancre on the penis on one side, and the enlargement in the groin on that side was very much out of proportion, very much larger than the glandular enlargement on the other side of the groin. Referring again to the case under discussion, I do not see what the sore on the cheek could be except chancre; I would have nothing else to suggest. I do not see what could produce that form of induration which is left. Taking the case just as it appears now, without any history, without any syphilide on the body, without any history of the effect of the mercurial treatment, simply the sore on the cheek and the glandular enlargement, I think the suggestion would be initial lesion. It does not look like eczema or any form of furuncle, or in fact anything except chancre; there has never been any sensitiveness or evidence of pain on pressure. The simple existence of these two conditions—the enlargement of the glands and induration on the cheek—I think suggest syphils. I agree with Dr. Palmer, that the day is probably not far distant when syphilis will be taken out of the class known as exclusively venereal diseases.

Dr. A. M. Cartledge: I believe this is a case of syphils with the initial lesion on the cheek. However, I do not know whether I would have been inclined to consider it syphilitic trouble had not Dr. Bloom given the history in detail.

Dr. Turner Anderson: I present here a submucous fibroid tumor removed from a woman, thirty-four years of age, who has been in the care of an irregular practitioner, who made diagnosis of pregnancy. The patient was a widow, and about as far above suspicion as possible. Upon examination I found this tumor, which was removed without great difficulty, promptly relieving the case. The tumor was found beneath the mucous membrane, and was without a pedicle. I secured it with a pair of forceps, pulling it down as low as possible, separating the adhesions with my finger, believing this to be the safest way. There was continuous hemorrhage for several weeks before I saw the patient, none afterward.

Dr. W. O. Roberts: At the annual meeting of the Medico-Chirurgical Society during the spring Dr. Anderson exhibited a patient (little girl) suffering from traumatic aneurism of the cheek. The history of the case was as follows: When the child was seven years old she was struck on the cheek with a stick. A swelling immediately raised, and never disappeared. At the time the patient was exhibited, which was seven years after receipt of the injury, those of you who saw the case will remember the strong pulsation of the tumor, and the thinness of the tissues superficial to it. Compression of the anterior temporal artery would cut off pulsation of the tumor. It was advised by the surgeons present at the meeting that an early operation should be performed, otherwise the tumor would increase in size and eventually the skin would give way. I saw the case with Dr. Anderson last Thursday, at the St. Mary and Elizabeth Hospital; found the growth had considerably increased in size. There was also a dilated condition of the smaller vessels on the surface extending some distance beyond the tumor itself. The skin of the growth was very thin and bluish in appearance. An operation was performed at once, Dr. Butler ad-
ministering the chloroform, Drs. Anderson and Bullock assisting. I made a long incision directly over the central portion of the tumor and carefully dissected it out. I think there were eight vessels ligated; hemorrhage very slight, and the patient has done uninterruptedly well since the operation.

Dr. W. C. Dugan: I have three specimens to exhibit: No. 1. Sarcoma of the kidney, removed on the 16th of last month at the Children's Hospital. A day or two before the operation the patient was brought in from the country by Dr. Durrett for some obscure abdominal trouble, and upon examination we found in the left side a large tumor extending under the costal cartilage and into the pelvis. Diagnosis of cancer of the kidney was made, and operation advised at once. Drs. Cartledge and Vance saw the patient, and both agreed not only as to the diagnosis, but also as to the advisability of immediate operation. Operation was performed on August 16th, Drs. Vance and Cartledge assisting. I made an incision extending from the eighth rib down over Poupart's ligament, removing the tumor and a portion of the surrounding tissue after ligating the pedicle. There was practically no hemorrhage, and no drainage-tube was used; patient on the table about sixteen minutes. The patient was troubled at the time of operation with malarial fever; temperature 100, 2° F., pulse 126, when she was put upon the table. I believe we made a mistake in operating on this patient when we did, and if I had it to do over again I would put her on treatment for malarial fever for a number of days before submitting her to operation. After the operation her temperature went up to 103° F., and pulse to 166; however, she has done very well since, leaving the hospital on the twentieth day. Since her return home she has gained flesh and strength, and is able to run and play as other children.

No. 2. This specimen is one of especial interest; it is the entire appendix, and I call particular attention to the shape of it. It was just as you see it when removed. The patient, I regret to say, died. On the 16th day of August I was called down near Jellico to see a young man suffering from what was supposed to be intussusception. I reached him on the 18th, after forty miles' jaunt over the mountains. I found the patient with pulse 110, very bad expression of the face, etc. Immediate operation was advised. He realized his condition, as he had been vomiting fecal matter since the Sunday previous. It seems on the 11th of the month, which was Thursday, he had a severe pain in the left side, which he attributed to having eaten a watermelon the day before. On Friday he was some better, and able to sit up, but still suffered pain and took an opiate. On Friday night a physician was called, who made diagnosis of intussusception. Vomiting was excessive, and he had no movement of the bowels whatsoever. He continued to grow worse, and on Sunday he had stercoraceous vomiting; then one of his physicians came to town for me, and I went out with him. Drs. Glass and Dailey, of Booneville, had charge of the case, and ably assisted me in the operation. I opened the abdomen, and passing my finger down to the cecal region this specimen was brought up, there being no adhesions at all; it looked very much like a large leech, and you can all see the resemblance. There was no hemorrhage at all, and cecal attachment very small, and shows that it has been made small by being twisted. The young man was in such condition as to require very rapid operation, so he was off the table and in bed in a very few minutes. Now, the pathology of this is especially interesting. You will (the appendix being cut open) notice here a large clot of blood. He had ulceration of the appendix, opening into one of the large blood-vessels, which resulted in a hemorrhage into the lumen of the appendix, ballooning it as it were, and he had this peculiarly developed appendix, which finally became twisted, causing obstruction and gangrene. This shows how little is required to cause complete intestinal obstruction, as in this case there was nothing else, yet there was complete obstruction, which was relieved by its removal. I left him in about two hours seeming to be doing well, but there was still a very bad expression about the face. He had two large fecal evacuations that evening and night, and cessation of vomiting, but died the next day at 10 o'clock in collapse.
No. 3. Next is an appendix removed from a patient who was under the care of Dr. F. C. Wilson. Dr. Wilson had made the diagnosis of appendicitis. There was no doubt about its being a case of appendicitis, as you will observe here an enterolith in situ. I was asked to see the case one week ago last Saturday by Dr. Wilson, and upon examination we found an induration in the right cecal region. At the time the patient's pulse ranged from 95 to 100, temperature practically normal. Now we considered this one of the "border-line" cases, and advised the little fellow to be left without operation until the next morning, provided the symptoms did not change for the worse, when we would see him again. He was given that night ten drops of the tincture of opium, which gave him a good night's rest. The next morning he felt well, but on examination the tumor in the cecal region was still marked, so we decided to delay operation no longer. There was little or no rise of temperature in this case at any time. I want to say that the doctor in this case had suspected cystitis at first, and had treated him for this condition, but upon examination the urine was found to be perfectly normal. The patient was put upon the table and an incision made from middle of Poupart's ligament toward the anterior spinous process, hoping to find the pus or abscess extra peritoneal. Dr. Kirk assisted in the operation. The peritoneum was separated from the iliac fossa without being opened; but, finding no pus, the peritoneum, which was much congested and rather protruded into the wound, was opened, and to our surprise we found a great deal of pus. The patient had general suppurative peritonitis; there were a great many patches of lymph of a dirty gray color on the omentum, and the whole peritoneum presenting that peculiar dirty gray appearance which we so often find in suppurative peritonitis. The cavity was thoroughly washed with hot water, and then the right cecal region loosely tamponed with iodoform gauze. The operation lasted about twenty to twenty-five minutes. He was taken off the table in good condition apparently, having lost nothing by the operation; he remained so all that day, and had a very fair night up to twelve o'clock, when there was considerable distension of the bowels. I saw him again at five o'clock, at which time there was decided tympany. We introduced a tube into the stomach and relieved him of much gas, and tried rectal injection of turpentine emulsion, salts, and water, etc., but septic paresis was profound, and he grew rapidly worse, while the discharge from the wound was perfectly sweet. Patient died about six o'clock. The bowels were enormously distended, and we were unable to get any thing through his stomach at all.

In the two cases reported, one had decided tympany, the other case no tympany at all. This makes eight cases of appendicitis I have had in the last two months, four of which have been fatal, making the mortality fifty per cent.

If an individual experience is to be relied on, I am justified in coming to the following conclusions:

1. The symptoms of appendicitis are variable and misleading, oftentimes simulating cystitis, intussusception, internal strangulation, etc.

2. The localized pain, "McBurney point," is often absent. I am convinced that that symptom has been dangerously magnified. Many regard it as almost pathognomonic, and when not found, cases of appendicitis are left to the mercy of accident, and allowed to drift beyond the safety line before counsel is called.

3. The sudden onset of an attack of severe colic in the young, which does not yield in a few hours to medicinal agents, should excite strong suspicion of appendicitis, and cause the physician to call to his assistance a surgeon, and thereafter see the case together as often as it be considered necessary.

4. I desire to place myself on record as most decidedly opposing the position of Drs. Loomis, Draper, and Delafield in maintaining that these cases are medical, and should be under the absolute control of the physician, he saying when the surgeon is to operate.

5. The first duty of the attending physician when he suspects appendicitis is to call a surgeon, for if he waits for the "beginning of sepsis or shock" or signs of perforation, etc., he had almost as well not call him at all. If the physician waits until he considers an operation necessary, oftentimes he has delayed too long, and, too, it is always desirable that the surgeon
become somewhat acquainted with his patient's temperament, etc., before the operation.

6. The presence or absence of temperature is of little or no significance. It is not unusual to find large accumulation of pus, even with subnormal temperature in these cases—a fact not generally appreciated. If every case of appendicitis, catarrhal or suppurative, were subjected to early radical operations, fewer deaths by far would result than under the present method of so-called conservative treatment. No stronger argument could be produced in favor of early operation than our inability to examine an abdomen and say what condition exists within, and the high rate of mortality in these cases if left to medical treatment alone. Some of the most severe cases, to judge from the subjective symptoms, prove to be nothing more than an intensely congested appendix, whereas some of the mild, "comparatively" safe, and "comfortable" cases were found to be diffuse suppurative peritonitis, with perforation; therefore, I maintain that since we are unable to diagnose the condition, and since exploratory operation under favorable surroundings and in skilled hands is not dangerous, I desire to enter a plea for early operation.

Dr. W. L. Rodman: The specimens you see here are several enlarged glands that I removed from the left inguinal region of a man about thirty years of age a few days ago. The enlargement of these glands followed an attack of gonorrhea; they were easily dissected out, and I did it almost entirely with my finger. The wound was thoroughly washed with 1 to 500 chloride of zinc solution, the patient being up and around the hospital in three or four days. There was not a drop of pus. I consider extirpation decidedly the best plan of treatment for these enlarged glands, and have been doing the operation for several years with excellent results.

No. 2. Here are two sections of veins, each of them taken from patients suffering from varicocele. The bloody one was removed today, and was the most extensive varicocele that I have ever seen. I brought the ends of the veins together by means of a continuous buried suture, finally closing the wound, also with continued suture, without drainage. There was not a drop of pus, and I think the result will be all that could possibly be hoped for.

Dr. H. H. Grant: What do you want to bring the ends of the veins together for?

Dr. Rodman: For the purpose of holding the testicle up.

JAMES S. CHENOWETH,
Secretary

JEFFERSON COUNTY MEDICAL SOCIETY.*

Stated Meeting, Louisville, Oct. 19, 1892. Dr. R. C. Chenault, President pro tem., in the chair.

Two papers on the Etiology, Pathology, and Treatment of Typhoid Fever were read, one by Dr. Drake and the other by Dr. Purdom.†

DISCUSSION.

Dr. J. W. Irwin: I hardly feel competent to discuss the two learned papers just read, and our time will not allow their discussion in detail. I am greatly interested in the subject, and have been for over twenty years. I have had considerable experience in epidemics of this disease, and am inclined to believe, on the whole, that the mortality of typhoid fever has not been alarming. I would not wish to boast as to the results of treatment or any thing of that kind, but in the last sixteen years I have had only two deaths from typhoid fever, and I believe a reasonable proportion of patients suffering from this disease have come to my notice, probably two hundred cases, which would make the mortality about one per cent of the cases I have seen.

I was very much interested in the paper first read, and must confess more interested in the last, in that the pathology of the disease as stated in Dr. Purdom's paper seems to conform to my own views more particularly. Seven years ago I announced, at a meeting of the State Medical Society held at Winchester, that typhoid fever was not a purely systemic fever at all; that typhoid fever was an inflammatory disease due to a local lesion in the bowel; and that owing to that local lesion, its extent, or the number of lesions in the bowel, did we have fever; in other words, that the fever was dependent directly upon the extent of the local lesion. That was before much was known

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*Stenographically reported by C. C. Mapes, Louisville.
†See pp. 280 and 285 in this issue.
about the action of bacteria in causing the disease. I think Dr. Purdom very clearly stated this point in his paper, that it was the bacteriological action which produced the lesions and the results afterward—the formation, for instance, of the toxalbumen, etc.—which being absorbed into the system caused the constitutional disturbance or fever.

Now, in regard to how typhoid fever reaches the system, I hold another view a little different from any I have heard expressed. I believe that the seeds of typhoid fever enter the system largely through the air we breathe. Whether we take them into the mouth through the air and then swallow them with food or drink, or whether we take them in the water or milk or other articles of food, it is difficult to tell, but the epidemics of the disease that have come under my observation point very strongly in the direction that the typhoid germs are communicated through the air we breathe.

As to the treatment of typhoid fever, I have thought that for a number of years there have been far too many drugs employed, and that the treatment should be very simple. We have very few antiseptics that can affect the progress of the disease, that can reach the seat of the disease before they lose their power, and I think that the internal administration of drugs in the treatment of this disease should be very much restricted. When we remember the pathological conditions that are going on in the intestine and system, it would seem to me quite reasonable that, where we have a disease generated at certain foci in the intestinal canal, to treat the system at large with drugs would rather be injurious than otherwise. Therefore, for many years I have given very few drugs in any form of typhoid fever. My rule has been to put the patients early to bed when they begin to complain, and let them remain perfectly quiet in well ventilated, large rooms, if possible. The diet to consist of milk, strained soups, and broths, to the extent of about a quart of milk and a pint to a quart of some of the soups or broths daily. That form of diet agrees with the patients very well, and need not be changed, and this mixed diet I believe makes its digestion much easier. I have never found any medicine to have any effect in arrest-

ing the progress of the disease. The use of antipyrine and other coal-tar derivatives has the effect of reducing the temperature, but when their effect passes off it immediately goes up again and leaves the patients worse off for their use, and therefore in very few cases have I ever employed such drugs in any form. I have found furthermore in lesions of the intestines, such as we have in typhoid fever, that the best remedy I have ever employed is opium. When the patient suffers from nervousness, from sleeplessness, from inability to rest on his bed due to nervous headache, which in many cases is very distressing, there is nothing equal to opium. It is the one great remedy in intestinal hemorrhage; it is the great remedy for tymanites; it is the great remedy in perforation of the intestines; it is the great remedy in nephritis where the kidneys become involved. In fact, opium is the only remedy that in my judgment seems to exert any favorable influence on the course of typhoid fever. I make this statement unqualifiedly because we can always see its good results. When we put the patient to sleep and make him rest, we gain just that much, and save the powers of the system.

As regards the use of alcohol: In many cases it has not been found necessary to administer it in the milder forms of the disease, but in the severer forms about the beginning of the second week sometimes alcohol becomes useful. Its introduction is always called for by the condition of the heart. I think the early administration of alcohol is a mistake, and it should be left entirely to fulfill certain indications calling for its use. I have found four to six ounces of whisky daily quite enough in any case if given judiciously, and, with the occasional use of opium to relieve some of the concomitant symptoms of the disease, all that was necessary in an uncomplicated case of typhoid fever.

In regard to the use of antiseptics: In the last few years all that I have employed have been failures. I am inclined to the belief that less medicine, better nursing, and more opium to produce sleep and rest constitute largely the treatment of typhoid fever in an uncomplicated case. Where intestinal hemorrhages occur there is nothing like opium, and so is it
with nearly all other complications arising in the course of the disease. Laxatives and cathartics do more harm than good, and I employ them only where I wish to remove undigested material from the alimentary tract. Overfeeding the patient gives rise to more diarrhea than all other combined causes, hence the use of food should be regulated accordingly.

Dr. Wilson: In my limited experience I think that there is no regular line of treatment for typhoid fever. A severe case of typhoid is usually treated by sponge-baths, and in fact you have to treat any symptom which may arise that is unfavorable. If I have a case of typhoid where the temperature runs very high, I generally resort to the wet-sheet pack, but instead of using cold water I use hot water, just as hot as can be borne. You can take a patient raving in delirium and put him in one of these wet-sheet packs, and the delirium will immediately cease. The duration of the pack should be half to three quarters of an hour, repeating at intervals of about an hour, owing to the severity of the disease. The patient should be carefully sponged off each time after removing the pack. My idea in this treatment is to fight against the destruction of tissue which is produced by the very high temperature. I am almost afraid to make the statement, but I have had cases where the temperature ran as high as 107.6° F., remaining there, however, for only a short time. I remember one case in particular where I gave one hundred of these wet-sheet packs. My general treatment for typhoid fever is directed toward retaining all the patient's strength for the critical period, which will undoubtedly come after the subsidence of the fever.

Dr. Trunnell: I agree with Dr. Irwin as to the inflammatory condition, because of the fact that his experience and mine are somewhat similar in the management of typhoid fever. In the treatment of this disease I have employed various remedies, but believe there is nothing equal to opium used in conjunction with whisky; sponge-baths are also very beneficial. In cases where there is hemorrhage I prescribe opium to check the bowels and stop the inflammatory processes. As to the mortality, I believe I can report equally as good success as Dr. Irwin in the cases I have seen. I have treated a good many cases of typhoid where there was absolutely no diarrhea, and instead constipation. I have never regretted the free use of alcohol in the treatment of typhoid fever.

Dr. W. Carroll Chapman: It seems to me that the cause of typhoid fever is the most important part, just as it is of every other disease; that is, whether it is a specific bacillus that causes typhoid fever, or whether that cause is due, as Murchison taught us years ago, to some decomposition in the intestines. Recent investigations show, and no doubt the majority agree, that typhoid fever is due to Eberth's bacillus, that is, a specific germ; and yet the most recent investigations would throw us back to where we were previous to 1880. That is the view which would suggest the treatment brought out by Dr. Irwin that was so remarkable in its results. If Eberth's bacillus, discovered by him in 1880, is the cause, Dr. Purdom's treatment—antiseptics—would be suggested. But if we are to accept the authority of such men as Rodet, Roux, and Vallet, it would seem that instead of Eberth's bacillus the bacillus coli communis is the real cause of typhoid fever. This we all know to be present in the intestines, or in the stools at least, at all times. This conclusion has been reached after a re-search in an epidemic of typhoid fever in which they failed to find Eberth's bacillus in the intestines at all, and in which they found the bacilli coli communis in full cultures from the beginning of the disease. After the twelfth or fifteenth day, however, they were able to discover, by puncture, Eberth's bacilli in the spleen, pointing to the conclusion that Eberth's bacillus was a result of further development of the bacillus coli communis instead of the cause of the disease.

Now, if Eberth's or any specific bacillus is the cause of typhoid fever, then I think we should be able to find some antiseptic that would destroy it and arrest the disease within the twenty-one days. On the other hand, if we accept what it seems to me the latest research proves, then we are forced to treat, as we have done heretofore, the symptoms alone.
Inoculation: A Preventive of Swine Plague. With the Demonstration that the Administration of the Agricultural Department is a Public Scandal. An Exposure. By Frank S. Billings, M. D., Director of the Patho-Biological Laboratory of the State University of Nebraska.

The title of this work covers its contents with somewhat of the roof to spare. The burden of the book, of more than three hundred pages, is that Dr. Billings has found a preventive of swine plague, and that Secretary Rusk persistently fails to recognize it. The danger is that the zealous laboratory director will yet find a larger number of people like minded with the Secretary than he will feel able to complain of by publication. There is still a large and not by any means decreasing number of people who believe that vaccination for smallpox is the only effective and permanent preventive of a disease by the methods of the nature of inoculation that is now known. They believe that most of the supposed triumphs of Pasteur are due to the fact that in the life-history of various low forms of life there come periods of vigor during which they flourish, and the others during which they seem almost to disappear, so that any measure of destruction that takes them on the wane gets undue credit.

Whenever any one discovers a remedy or preventive for a disease that affects, and even at times threatens with destruction, so large a moneyed interest as does hog cholera, he will not need to stop to quarrel with the Secretary of Agriculture or any other person, for he will speedily need all his time to supply his remedy. There is, however, another interesting feature in this publication. It develops the habitat of a vigorous microbe that for many seasons has been working havoc in various quarters. It is a matter worthy to be inquired of whether there is not some waterway or railroad communication, or at the very least a stretch of plain or prairie, by means of which the microbe in question may find its way from the patho-biological laboratory at Lincoln to the Missouri, so that it can appear in vigorous form at Kansas City, and can even reach St. Louis not quite exhausted. When caught and well corralled it might perhaps be fitly denominated the "microbe of egotism." — D. T. S.


These three volumes are fairly well written expositions of the present state of the diseases they relate. They belong to the Physician's Leisure Library Series, published by George S. Davis. The price is 25 cents per single copy, or $2.50 per year.

The Operative Treatment of Enlargement of the Prostate. Based upon the Records of upward of One Hundred and Forty Cases. Three Lectures Delivered at the Royal College of Surgeons. By C. W. Monsell Moullin, M.A., M. D., Oxon., F. R. C. S., Hunterian Professor of Surgery and Pathology, London Hospital, etc. 82 pp. London: John Bale & Sons. 1892.

These lectures afford a presentation of the various methods of treating enlarged prostate that to the reader are in a high degree satisfactory. The writer is evidently a master of his subject, and writes in a style in a high degree attractive.

The three methods of treatment of enlarged prostate to which he mainly gives consideration are drainage by cystotomy, supra-pubic prostatectomy, and perineal prostatectomy. Other methods are named, though only to be disapproved of, unless it be Dittel's method of lateral prostatectomy, which the author thinks sometimes advisable.

The author concludes that the operation may be radical—that is, that the whole of the obstructing prostate may be removed by selecting suitable methods; that as a rule the enlargement will not return, and that in the majority of cases there is a fair chance of the bladder regaining its power.
The risk by all methods is considerable, from fifteen to twenty per cent proving fatal. The writer advises the supra-pubic method in all cases where this is practicable, and the perineal method when the contracted condition of the bladder walls prevent the viscera from rising high enough for the supra-pubic. He thinks either method preferable to drainage, except in cases where the capacity of the bladder is very greatly reduced, and when it has become hard and rigid and can not be distended, and especially where there are signs of kidney trouble. In these cases such palliative measures as drainage are alone to be thought of. D. T. S.


Dr. Taylor's Manual of Medical Jurisprudence has for many years held an undisputed place in the front rank of works of its class in all countries. In the courts of all English-speaking peoples it has become the recognized authority, while scarcely a teacher of medical jurisprudence could be found where the English language is spoken who does not have "Taylor" as his constant companion.

The present edition is an entire revision of previous American and London editions, and completely incorporates the admirable contributions with which Dr. Stevenson enriched the twelfth English edition. The work has been especially improved in its legal aspect. In making additions upon the present state of the law bearing upon medicolegal matters, nearly seven hundred cases and authorities have been cited by the editor to aid counsel in preparing briefs, and to extend the sources of definite information for medicolegal jurists. Not only has this volume had successive revisions by the highest medical authorities of the English-speaking race, but it has also had the benefit of a thorough revision by a legal authority who has made long and critical study of the subject with special reference to the practice of the courts of America. With Taylor for his guide no physician need fear to meet any medicolegal question likely to come up in his experience.

D. T. S.


This work appears not to be intended as a systematic treatise even in the epitome of the department to which it relates, but embraces essentially the course of lectures delivered to his classes by the author. Some parts appear to be treated at disproportionate length, but this is probably unavoidable in a brief course of lectures, where to condense all alike might be to strip all parts of any thing like lively interest. The quality of the work is what might be expected of the learned author. D. T. S.


The most exacting could not ask a more exhaustive treatment of the subjects embraced in this work than is to be found in its pages. It does not profess to be a treatise on cardiac diseases, but is almost entirely devoted to the study of methods of physical examination under both healthy and morbid conditions, and must certainly prove equal to every requirement.

D. T. S.


This work is one of the numbers of the Student's Quiz Series, and may be justly pro-
nounced one of the most happily arranged of the whole class to which it belongs. Every word counts from cover to cover. D. T. S.


Tuberculosis of Bones and Joints. By N. Senn, M. D., Ph. D., Professor of Practice of Surgery in Rush Medical College, Professor of Surgery in the Chicago Polyclinic, etc. Illustrated with 107 engravings. In one handsome octavo volume, 520 pages. Extra cloth, $4 net; sheep, $5 net; half Russia, $5 net. Philadelphia: The F. A. Davis Co. 1892.


Correspondence.

LONDON LETTER.
[FROM OUR SPECIAL CORRESPONDENT.]

Epidermin; A New Milk Standard; A Brave Deed; The Konoscope; Dental Decay; A New Bacillus; Section in Pelvic Abscess; The Ladies Sanitary Association; The School Board and Dentistry; The Color of the Eyes; Proposed Government Sanitary Survey.

Epidermin is at present being somewhat extensively used in dermatology, and is generally looked upon with favor as a vehicle for the absorption of various medicaments. It is pure beeswax artificially compounded into a liniment with water and glycerine. Thus is formed a milky, half-fluid substance which attains greater consistency upon being exposed to the air. Spread upon the skin it dries in a few minutes to a teneacious, elastic, and delicate pellicle. The preparation has to be kept in glass bottles with glass stoppers and wide necks.

All milk supplied to London households is legally expected to fulfill certain conditions which were determined after an exhaustive examination into the composition of milk made by the authorities of Somerset House ten years ago. In order to ascertain whether any changes have since taken place affecting the value of the standard, a fresh investigation into the milk now generally produced from the cow has been undertaken, and just now an analysis is in progress at the principal laboratory under the direction of Dr. James Bell, F. R. S. It will occupy a considerable time, and its results may affect the operation of the adulteration laws.

Dr. Robert Jones has earned the admiration of his fellow-workers at Earlswood Asylum for his bravery in saving the life of a child at the risk of his own, and they have presented him with quite a substantial testimonial. Dr. Jones sucked the tube in a case of tracheotomy for diphtheria.

At the late Sanitary Congress at Portsmouth the address delivered by Dr. W. J. Russell was considered most interesting, his subject being the Chemical History of the Air. Dr. Russell pointed out that the properties and phenomena of the air were to a great extent known to the ancients, but it was not until the seventeenth century was well advanced that an English chemist, Hooke, in 1665, recognized that what Boyle and Bacon thought a “volatile niter” or a “crude windy” spirit in the air was really oxygen. Priestly, a hundred years later, rediscovered what Hooke had already found out. The means of analyzing the gases of the air Dr. Russell considered remained very imperfect until 1857, when Bunsen’s great work on “Gas Analysis” was published, but it was not until the second half of the nineteenth century that the exi-tence and importance of air-dust was suspected, and it was due to Mr. Aitken that the important part air—pure and impure—would play in sanitary science was thoroughly appreciated. Dr. Russell spoke most highly of the “konoscope” invented by Aitken, and said every sanitary inspector would find it of the greatest possible use for testing rapidly and easily the air of cities and rooms.

The more the brain work the worse the teeth, is the last word of physiological chemistry. It is also asserted that unless some effective measures are not devised for preventing dental decay the poor classes of England will be practically toothless in a few more generations. The well known dental expert, Mr. Leon Williams, points out that the Americans, who he thinks live at the highest nervous pressure, have, as a race, the poorest teeth. Mr. Williams is very severe upon “that cheap and vile apology for dentistry” which extracts teeth.

Now that it is proposed to introduce £1 notes into this country, a bacteriologist has drawn attention to the fact that a deadly and sure medium for the migration of bacteria is the bank note of small denomination. For recent experiment some foreign notes were selected, and in two cases 19,000 microbes were discovered vegetating on a single note; among them were identified microbes of tuberculosis, diphtheria,
and scarlatina. The great majority of the microbes belonged to a peculiar type which it was suggested should be called the Bank-note Bacillus.

During a discussion at the recent meeting of the Obstetrical Society, upon the value of abdominal section in certain cases of pelvic peritonitis, Mr. Alban Doran thought that a free incision should be made through an abscess which pointed anteriorly, the cavity being washed out and then explored carefully as the peritoneal cavity is in abdominal section, for fear a deeper collection of pus should be overlooked and left unopened. He invariably, he said, treated supplicative parametritis as a case for the operating theater, and not as an affection to be left to mere puncturing and poulticing.

During the autumn a course of six lectures are to be delivered, at the office of the Ladies' Sanitary Association, on Nursing the Sick, and the subjects to be dealt with are the Sick-room, Nursing Detail, Medical Nursing, Infectious Diseases, and Surgical Nursing. The Association was formed by a few ladies who, being convinced that one of the principal causes of a low physical condition is ignorance of the laws of health, combined for the purpose of extending and popularizing sanitary knowledge. This they have endeavored to do by distributing tracts on sanitary and domestic subjects, by aiding to establish loan libraries on matters relating to health and social well-being, by delivering practical lectures on similar subjects, and by the formation of branch associations in various localities for carrying on practical sanitary work. The Association is entirely dependent upon voluntary contributions.

In the schools at Sutton, under the management of the South London Metropolitan School District, the boys and girls, numbering 1,985, and varying in age from three to seventeen, have been dentally inspected. The statistics published show that 40,000 teeth were examined, of which 4,677 were unsound. The majority were dealt with by the process of "filling," but no fewer than 1,479 required extraction. Mr. Pedley, the examiner, points out that much suffering in after life springs from neglect of the teeth of children, and he strongly urged the Board of Management of the schools to appoint a duly qualified dental surgeon, who should be paid by the board a salary of at least £150 a year. In addition they should provide a dental chair, a dental engine, a set of extracting forceps and stopping instruments, at a cost of £30 a year, and provide £10 annually for stopping materials. The matter is now under consideration.

People, unfortunately, have not the power of choosing the color of their eyes, or a universal rush would be made on blue, for it appears that among the great men of the world blue eyes have always predominated. Socrates, Shakespeare, Locke, Bacon, Milton, Goethe, Franklin, Napoleon, and Renan all had blue eyes. The eyes of Bismarck, Gladstone, Huxley, Virchow, and Buchner are also of this color, and all the presidents of the United States except General Harrison, enjoyed the same cerulean color.

Surgeon-General Cornish, in an address at the College of State Medicine, maintained that at a time like the present, when epidemic cholera was hovering around our shores, it was very essential that a complete sanitary survey undertaken by the Government should be made of every area under local authorities, for to go on from year to year, hoping that their sanitary armor was complete when they had never attempted the testing of its individual joints, was about as foolish a proceeding as a nation could indulge in. The public press during the present epidemic had risen to the occasion, and the main features had been recorded from day to day with a fullness and an accuracy, leaving nothing to be desired. He urged a "sanitary stock-taking" of the country by an independent staff accustomed to the work, which should include an account of rivers and streams.

London, October, 1892.

Emulsion of Iodoform in Echinococcus Cysts.—Prof. Bilroth evacuates the cyst of its contents, injects an emulsion of iodoform, and then closes the wound. If the cyst be voluminous, there is danger of iodoform poisoning. This method was tried in four cases with successful results.—Lancet-Clinic.
Abstracts and Selections.

Fracture (Dislocation) of Spine; Reduction; Temporary Recovery.—W. J., aged eighteen, was struck in the back by a heavy iron gate, which fell upon him. He was admitted into Guy’s Hospital at 1:30 P. M. on June 13th, where he was found to have some deformity of the spine about the tenth and eleventh dorsal vertebrae, between the spinous processes of which a gap of some extent could be felt. He then had apparently complete or nearly complete power over his legs as he lay on his back in bed. By about four o’clock he began to complain of pain in his legs and in the lower part of the abdomen, and when asked to move his legs he did so with much difficulty and but to a slight extent. It was impossible to say how far his inability to perform any movement was due to a loss of control over the muscles or to a di-inclination to make any alteration in the position of the limbs owing to a consequent increase in the pain from which he suffered. Probably both conditions existed. As time went on the hyperesthesia became more marked and any movement or noise in the vicinity of the bed exaggerated his pain greatly. This was most obvious below the knees. Sensation was at the same time much modified. For instance, pulling a hair of his leg caused him great pain, though he could not tell what had been done. The reflexes were much exaggerated.

Mr. Golding-Bird saw the patient just after his admission, before any of the above symptoms had developed, and in his absence I saw him at 11:30 P. M. As the symptoms were steadily increasing in severity I determined to operate at once. A long incision being made, and the spinal muscles having been turned aside, it was found that the tenth dorsal vertebra was displaced forward and slightly downward, so that the cord was compressed between the laminae of the tenth and the body of the eleventh dorsal vertebra. The displacement was not considerable, so that the cord was apparently squeezed rather than crushed. The interspinous ligament was torn through. As the lower articular processes of the tenth dorsal vertebra lay in front of the upper articular processes of the eleventh dorsal vertebra, the latter were cut away. After great difficulty the tenth dorsal vertebra was dragged back into its normal position. This was effected partly by over extending the dorsal spine and partly by traction exerted upon the spinous process by lion forceps. As upon the removal of this traction the displacement recurred, I passed a stout silk ligature between the spinous processes of the ninth and tenth and the eleventh and twelfth dorsal vertebrae, and by that means tied the tenth and eleventh spinous processes immovably together.

On June 14th the symptoms continued as before the operation. On the 15th they diminished slightly but distinctly. On the 16th the improvement continued, but it was still necessary to give morphia to control the hyperesthesia. By the 21st the hyperesthesia had disappeared, and he could move his legs a little, apparently without pain. The silk ligature was then removed. By the 26th he appeared to have recovered complete control over his legs. The spinous processes were in good position over the same transverse plane. The reflexes were then normal. The patient was extremely troublesome and restless throughout, and after the wound had apparently healed firmly it broke down, a portion of a spinous process coming away, when the ligature, being useless, was removed. He kept constantly rolling about, and complete paraplegia soon developed. The spine was then explored, when the vertebrae were found to be displaced laterally upon one another and the cord was completely divided. This unfortunate result was due solely to the extremely troublesome character of the patient, a poor half-starved, half-witted creature, whom it was found impossible to control satisfactorily by any means.

The case is one of much interest, and resembles more or less closely one published by Mr. Golding-Bird last year. It would appear that the symptoms in this case were due to pressure rather than to the presence of hemorrhage inside the cord. It was evident at the time of the operation that there was no such considerable collection of blood inside the sheath of the dura mater as could produce symptoms of compression, and one was surprised that there was not more paralysis, since the cord appeared to be compressed within narrow limits by the displaced vertebrae.—Mr. W. Arbuthnot Lane, London Lancet.

Injection of Testicle Juice in Cancer. Brown-Sequard (Sem. Medical, September 7, 1892), after referring to his previous reports on the value of hypodermic injections of testicle juice in increasing the energy of the nervous centers, improving nutrition and secretion, and giving tone and strength, said he had hitherto purposely abstained from speaking of the effect of the remedy in cancer, although he was acquainted with facts which appeared to demonstrate with certainty the happy influence of the injections in patients suffering from malignant disease. Facts which had recently come to his knowledge, however, no longer per-
mitted him to keep silence. He then gave particulars of a case communicated to him by Dr. Labrosse, of Mustapha in Algeria, who had treated by injections of testicle juice (rabbit's) a woman with cancer of the womb beyond operation. After a dozen injections the patient, who was in the cachectic stage, and was so weak that she could not leave her room, was able to walk about and to go out on foot or driving, which she had been unable to do for a year. Moreover, under the influence of the injections alone, the discharge, which had been very profuse and offensive, ceased altogether. Brown-Sequard promises to publish further facts of the same nature at some future time.—British Medical Journal.

SUTURE OF THE LUNG.—At a recent meeting of the Paris Academy of Medicine, Dr. Guermonprez reported an interesting case of suturing of the lung in a young man of eighteen years. (Journal des Sciences Médicales de Lille, September 2, 1892.) The patient had pyopneumothorax following pleurisy. Thoracoplasty was practiced, six ribs being excised, when the gaping orifice of the broncho-pleural fistula was readily seen. Some difficulty was experienced in closing the opening, as one of the sutures broke and another tore through the pulmonary tissue, but finally three catgut sutures were passed, one of them going directly through the center of the fistulous track and embracing a sufficiently large portion of the lung tissue to hold firmly. As soon as these sutures were drawn together the passage of air through the fistula ceased, and on the thirty-eighth day after the operation cicatrization was complete.

A NEW TREATMENT FOR PHthisis.—De Renzi (Riv. Clin. e. Terap. No. 6, 1892) publishes a new treatment for phthisis, consisting in the use of iodine internally in the following form: R Aq. dest., 1,000 grs.; iodine, 1 grs.; pot. iod., 3 grs.; sodium chlor., 6 gr. This was first injected into the ear vein of healthy and tuberculous rabbits, into the subcutaneous tissue of dogs, rabbits, and guinea pigs. Complete tolerance being established, he tried the remedy on phthisical patients. Hypodermic injections were first given, and as much as 100 gr. were given; these were not, however, well borne, so the drug was then given by the mouth, using from 500 to 550 grs. Nineteen patients, nearly all with advanced phthisis, were thus treated. In all the treatment produced increased appetite and increased flow of urine. Symptoms of iodism arose in a few instances, but disappeared on leaving off the treatment. The author is of opinion that the results of this treatment will compare very favorably with those of any other at present tried; the body weight increases, the number of bacilli diminishes in the sputum, and the temperature is reduced to normal.—British Medical Journal.

INJECTIONS OF STRYCHNINE IN CHOLERA.—T. Firench-Mullen states (Indian Med. Gaz., July, 1892) that he has given hypodermic injections of strychnine in some hundreds of cases of cholera, with very satisfactory results. He uses the method in every case in which collapse has set in, or seems to be coming on. He gives min. v of liquor strychnini in an equal quantity of water. As his patients were almost all seen in their own homes, and there were so many to be visited, it was, as a rule, only possible to give two injections in the day (morning and evening) to any one case. He has, however, given five injections in twenty-four hours, and two more during the following twelve hours in the case of a prisoner where the effects could be watched, and has no doubt the man owed his recovery to the remedy. When the urinary secretion has not been re-established within twelve hours or so of the cessation of the other symptoms, Firench-Mullen has given hypodermic injections of pilocarpin with marked success in many cases, urine being passed within less than five minutes after the use of the syringe.—Ibid.

Paroxysmal Tachycardia.—The following is the formula recommended by Huchard in the treatment of this condition:

Quininae sulphatis, 1, 8:.... gr. lxxvii;
Extracti ergoti aquosij, 1, 8:.... gr. viii;
Extracti nucis vomicosvi, 1, 8:.... gr. viii.

M., et div. in pill No. 40. Siz: Two pills, two or three times a day for a fortnight.

This remedy, which is especially indicated in cases in which there is diminished arterial pressure, may be followed by from ten to twenty drops daily of Pearson's solution of arsenic, continued for six or eight weeks.—Medical Record.

Albuminuria in Epilepsy.—According to the investigations of Drs. Voiisin and Peron (Arch. de Neu.) transient albuminuria follows a fit in about fifty per cent of epileptics. The amount of albumen is generally increased, to a certain extent, in proportion to the number of epileptic attacks; it is greatest in those cases where there is marked cyanosis and congestion of the face; the albuminous excretion reaches its maximum as a rule in the first two hours subsequent to the last fit. In status epilepticus the urine always contains albumen; therefore eclampsia and epilepsy can not be distinguished by the presence or absence of albuminuria.
THE PAN-AMERICAN MEDICAL CONGRESS.

The preliminary announcement of the promised congress of medical men from all American countries is now before the world. The programme is well supplied with material for scientific entertainment and schemes for social enjoyment, and it is to be hoped that this most worthy effort to establish medical reciprocity between our country and Canada and the countries of Latin America will have the unqualified support of the profession of the United States.

The Secretary-General, Dr. Charles A. L. Reed, informs us that the expense of organization is heavy, and must be met out of advance registration fees. The registration books are now open, and those who wish the enterprise success will at once send their names and registration fees to the treasurer, Dr. A. M. Owen, Evansville, Indiana.

THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.

On the 15th, 16th, and 17th of the present month Louisville will have the honor of entertaining this vigorous young Society. It is probable that no society in medicine ever came more suddenly into existence, or more speedily demonstrated its right to live than the Southern Surgical and Gynecological Association. Its first meeting was a brilliant success, and each subsequent meeting has developed new features of strength and interest. The reasons for this display of vitality are of course not far to seek. Since surgery is and has been for many years the glory of Southern medicine, the material for a first-class surgical society stood ready at hand, and needed only to be put into shape.

The preliminary programme, which we append, presents names and themes which insure the scientific success of the coming meeting, while the social features promise to be all that might be expected of Kentucky's metropolis.

Come, and welcome, "our oxen and our fatlings are killed," and if our presses are not bursting with new wine, our stills are dropping and our sunshine is mellowing a beverage more grateful to the circumvallate papilae of the Southern connoisseur.


The following is a partial list of papers to be read: The President's Annual Address, J. McFadden Gaston, M. D., Atlanta, Ga.; Cervicitis, Bedford Brown, M. D., Alexandria, Va.; Surgical Treatment of Endometritis, A. Vander Veer, M. D., Albany, N. Y.; Experiences in Pelvic Surgery, A. V. L. Brokaw, M. D., St. Louis, Mo.; Craniotomy upon the Living Fetus is not Justifiable, Cornelius Kollock, M. D., Cherokee, S. C.; A Case of Extensive Hematocele Resulting from Tubal Pregnancy Rupturing into the Broad Ligament, W. D. Haggard, M. D., Nashville, Tenn.; Fibroid Tumor of

J. M'Fadden Gaston,
President.

Notes and Queries.

Another Medical Prince.—At the University of Edinburgh the medical commencement was held during the first week in August. Among those who received the degree of Bachelor of Medicine was an Indian prince, Sir Baghvat Singh Jareja, the Thakore Sahib of Ghoudal. He is said to be the first native prince of Hindustan to acquire that particular degree or any other Scotch medical diploma. His subjects purpose to signalize the unusual event by erecting a statue to their ruler in his capitol in Ghoudal, in which the newly made medical prince will appear in the gown and hood of his degree, worn over his full native costume.—Journal American Med. Association.

Hemorrhoids.—Dr. Kosobudski uses the following ointment with good effect in hemorrhoids (Medical Record):

Chrysarobin........................ gr. x1;
Iodoform ................................ gr. xv;
Extract of belladonna.............. 5 ss;
Vaselin.................................. 5 jjs.
M. Sig: For external use.

The New York Medical Journal states that Professor Hobart A. Hare, of Philadelphia, has, at the request of the Nizam of Hyderabad, undertaken a new research on the action of chloroform.

Are Miracles Unnatural?—Some time has elapsed since the outside world, inhabited by most of mankind, was stirred by details of the striking cures reported to have occurred at Lourdes. We do not intend or even desire to dispute the reality of many if not all such, though we may be allowed to question the veracity of even official reports concerning them. It is, however, we consider, a most unfortunate fact that the minds of so many persons are unable to regard occurrences of this kind as other than subversions of the law of nature. The merc phrase is in itself destructive of all rational ideas on the subject, and introduces doubts, difficulties, and disunion among the relations of the physical and spiritual worlds which a multitude of other circumstances show to be similar and consanguine parts of the same Creator's handiwork. It implies no discredit to
the character of religion, and no reduction of their own marvelous reality, that miracles should be found capable of natural explanation. The marvel of success remains as great as ever, nay, is enhanced by the wonder of simplicity disclosed in its method, while faith in what was once a mere dogma becomes both purer and stronger when that dogma is shown to be consistent with the rest of the universal order. The "miracles" which in our day attract, not unreasonably, the devout in this and other countries are neither novel nor irregular. Such happen daily in the experience of practitioners. The performance of some has even the shroud of mystery still about it, while it answers to the tests of scientific treatment. Others are more manifest. Still, as of old, "the blind receive their sight, the lame walk, the lepers are cleansed, the deaf hear;" nay, some who to all appearance have trespassed for a brief space within the boundary line of death return to earthly duties, and we know something of "how and why." Should we then regard miracles as opposed to the law of nature, and not rather as facts illustrative of that law, and though once unknown to us never unknowable, and always related in the presiding Mind of the universe with reason, will, and order?—London Lancet.

Children's Teeth.—The statistics brought forward by Messrs. David Fisher and George Cunningham (who have so long been identified with the "cause" of children's teeth), and which have repeatedly been the subject of papers read at the British Dental Association and other societies, are further supplemented by a report by Mr. Denison Pedley. This report is derived from a systematic examination of 1,985 children at the Sutton district schools. Although not so black as some, yet it shows an enormous amount of disease, for out of this number only 527 are recorded as having sound dentition. Mr. Pedley makes some pertinent remarks. The temporary teeth, he says, are popularly thought not to be deserving of any particular attention, whereas much misery and detriment to health may be avoided by judicious treatment. Between the ages of six and twelve there were, according to the table, 758 permanent teeth that could and should have been saved, 201 hopeless, and 121 which had already been extracted, most of these being the six-year-old molar, a tooth so often mistaken by parents for one of the temporary set. He suggests that all public schools should have a paid dental surgeon, who should periodically examine all the children and perform any operations, conservative or radical, that are considered to be desirable, and moreover, that a record should be kept. These views are entirely in accordance with our own, and, we are glad to say, are gaining ground generally, as exemplified by the recent sanction of the Local Government Board to the appointment of a dental surgeon to the Central London district. The records of so large a number of cases as would come under observation in such an appointment, if carefully kept, could not fail to be of scientific value.—Ibid.

The Second International Congress of Physiologists.—The Second Triennial International Congress of Physiologists has this year held its sittings at Liège, with Professor Holmgren (Upsala) as President, in the physiological Institute of the University. The Congress terminated on Thursday, September 1st, after a banquet at which the burgomaster of the city was present. More than one hundred European physiologists attended the Congress; of these, twenty-four represented Great Britain and Ireland, the number of British members being larger than at the Congress at Basle four years ago. Professor Michael Foster and Professor Burdon-Sanderson were present. The following communications were read by the British members, and illustrated for the most part by experimental demonstrations: On the first day, "Nucleo-albumins," by Prof. Halliburton, of London; "The Fate of Peptone in Blood and Lymph," by Dr. Starling, of London; "The Action of Antagonistic Muscles under Reflex and Cortical Excitation" (demonstration), by Prof. Sherrington, of London; "The Action of Antagonistic Muscles under Reflex and Cortical Excitation" (demonstration), by Dr. Noel Paton, of Edinburgh; "Varieties of Leucocytes" (with dem-
onstration), by Prof. Sherrington; "Structure of Striated Muscle" (with demonstration), by Prof. Shäfer; "Cortical Centers for Movements of the Anus and Vagina" (demonstration), by Prof. Sherrington. On the third day: "Temperature and Excitability" (with demonstration), by Prof. Gotch, of Liverpool; "The Depressor Nerve," by Dr. Bayliss, of London; "The Capillary Electrometer and Observations on Muscular Contraction," by Prof. Burdon-Sanderson and Mr. Burch (Oxford); "Myothermal Observations upon Man" (with demonstration), by Dr. Waller, of London. It was agreed to hold the next Congress in 1895, at Berne, in the Physiological Institute of the University, under Prof. Hugo Kronecker. The general secretaries chosen for the next Congress are: For the French language, Prof. Arloing; for the German language, Prof. Exner; for the English language, Prof. Sherrington.

**Simple Tests for Impurities in Water.**—The following methods of determining the presence of impurities in water are given by Walling: (1) For organic matter, put a little of the sample into a beaker, add two or three drops of dilute sulphuric acid, and color distinctly with a solution of permanganate of potassium. If much organic matter is present, the color of the permanganate becomes discharged almost immediately; if less or very little, it takes longer to decolorize. If the color has not changed in twenty-five or thirty minutes, it is safe to assume that organic matter was not present. This is a tolerably reliable test. (2) For nitrates, a little sulphuric acid added to the water forms nitrous acid if nitrates are present, which is easily detected by its power of liberating iodine from iodide of potassium. A little starch paste is mixed with a small quantity of a solution of potassium of iodide, and the mixture added to the suspected water containing the sulphuric acid. If nitrates are present, the nitrous acid formed liberates the iodine from the iodide, which turns blue with starch. This indirect method is a ready means for detecting the nitrates if present in not too small a quantity. (3) Nitrates are detected by converting into nitric acid, which turns morphia red. A portion of the water is evaporated to dryness, and the residue treated with a drop of strong sulphuric acid (which makes nitric acid of the nitrate) and a portion of morphine added. If nitrate is present the morphine gives red color. (4) For ammonia, Nesler's reagent is by far the best test. It may be made by dissolving eighteen grains of oxide of potassium in a little water, adding solution of mercuric chloride until the red iodide of mercury first formed redissolves upon agitation. To this is added a solution of fifty grains of caustic potassa and distilled water to make eight ounces. This reagent will detect 0.00375 of a grain in a pint of water by giving a yellow color. A reddish color or precipitate forms with larger quantities of ammonia. (5) Albuminoid matter requires a more elaborated proceeding for its detection. If all of the above were found it is hardly necessary to go to the trouble of looking for albuminoids; the water would be wholesome even if they were not present.— *Pharmaceutical Era.*

**Measures of Precaution Adopted in Nursing Cholera Patients.**—The precautions in cholera-nursing are essentially the same as for nursing typhoid fever, only more rigid and severe, as the disease is more virulent. The following rules were enforced and disinfectants employed at the London Hospital at the time that Mrs. Gladstone nobly gave her services, and the sisters of All Saints, Margaret Street, aided the hospital so successfully: The first two or three days Condy’s fluid, diluted, and chloride of lime; subsequently carbolic disinfecting powder and carbolic acid, largely diluted (1 to 40), mixed with sawdust in quantities sufficient to wet the sawdust and sprinkle about the passages, wards, closets, etc. None of the excreta from patients was allowed to be emptied into the sewers; instead of this a portion of dilute carbolic-acid fluid (about half a pint) was put into each chamber-pail, and buried in the garden. The pails had water-tight lids. Burnett’s fluid was sprinkled in the cabs that brought the patients. The straw from the beds was burnt in each case of death, or where much soiled by excreta. The linen from the cholera wards was washed separately in the laundry of the hospital with McDougall’s
disinfecting soap. Hot coffee, beef tea, etc., were recommended to be taken by the nurses at early dawn, and every one was advised to avoid going on duty with an empty stomach or in a depressed condition. An extra allowance of wine and pay was made to the nurses. *British Medical Journal.*

A Defense of the Use of Opium by Women in India.—At a recent meeting of the Woman's Missionary Conference in Toronto, Miss Beatty, a medical missionary from the western part of India, spoke against the efforts making to restrict the use of opium by the natives of that country. She said it would be cruel to take it away from suffering womanhood until civilization had opened the door of the zenanas to medical men, or there were enough women doctors to relieve the agonies which women suffer and must bear without treatment. Opium is inexpensive. All women take it. All babies are drugged with it, and the poor little child-wives are relieved by its aid. "I have seen," said Miss Beatty, "a little girl of thirteen with her own baby on her lap. It was drugged and no trouble to her. How could it be when it was asleep? And she would put up her little hands and plead for a doll to play with while she was free from the care of her little one. While the present awful state of things maintains in India, opium is something to thank God for."

A Code of Effective Cholera Precautions for Doctors and Nurses Observed in 1885.—Although cholera raged so severely in Chili in 1886–87, the doctors and nurses in a number of small hospitals in different localities of the town were enabled entirely to protect themselves. Each of the hospitals contained from fifty to sixty beds, and had a staff of six doctors, six students, and thirty attendants. All wore long aprons, reaching from the chin to the feet, and caps. For washing the hands and face a solution of corrosive sublimate (mercuric chloride, 1 to 1,000) was exclusively used. In the dining-room all dishes before being used were strongly heated by the flame of burning alcohol. The bread was sterilized by toasting. It is stated that no one of the staff sickened who adhered rigidly to these precautions. The convalescent before their discharge were bathed in the corrosive sublimate solution, and their clothing was washed in a similar disinfecting solution. The floors of the hospitals were made of a kind of pine parquet soaked in tar, and were washed daily with a solution either of copper sulphate or potassic permanganate, 1 to 1,000. On emptying a ward it was fumigated according to rule by sulphurous-acid gas for twenty-four hours.—*British Medical Journal.*

Eleventh International Congress.—As a recent notice in this journal has informed our readers, the Eleventh International Congress will meet in Rome, Italy, from September 24 to October 1, 1893. By an official letter dated August 22, 1892, and signed by Professor Guido Baccelli, President, and Professor E. Maragliano, Secretary General, Dr. A. Jacobi, of New York, has been directed to form an American Sub-committee. Its membership is not yet complete, but on it are already found, beside that of the chairman, the names of Drs. Wm. Osler, of Baltimore, S. G. Busey, of Washington, N. S. Davis, of Chicago, Charles A. L. Reed, of Cincinnati, Wm. Pepper, of Philadelphia, F. Peyer Porcher, of Charleston, James Stewart, of Montreal, and Alexander J. C. Skene, of Brooklyn, N. Y. In the interest of facilitating the trip to Italy and reducing the expense arrangements will be made with the steamship companies. According to a communication from the Central Committee—contained in a letter of the Secretary-General, dated September 14th—the North German Lloyd proposes to reduce the fare to Genoa by twenty per cent, and that of the return trip by ten per cent. It is expected that still more favorable terms will be secured.

Cholera Inoculations.—Now that the daily newspapers have taken up the subject of cholera inoculation, and are sending correspondents to test their preventive efficacy in corpore vilo, it is well to recall the fact that Ferrán practiced them in the south of Spain some seven years ago. The first experiment was made on February 23, 1885, Dr. Serenana, an assistant of Ferrán, having been inoculated in
each arm on that date. Three hours after the injection he had a severe pain in the posterior part of each arm, and at the end of seven hours had a slight chill with some elevation of temperature and a rapid pulse, and complained of a moderate headache. At the end of twenty-four hours all these symptoms had passed away. Another inoculation, nine days after the first, was followed by negative results. In the epidemic which occurred the following summer Dr. Ferrán and his assistant made a very large number of inoculations, and the claim was made, and supported by elaborate statistics, that the inoculations were really preventive, the morbidity and mortality among the vaccinated being markedly less than in the unprotected. The author of the method met very naturally with much opposition, both at home and abroad, and he seems to have been unable or unwilling to contend against it, for since the publication of his statistics at the close of the epidemic of that year nothing more has been heard of his inoculations, and even the Spanish papers make no claims for priority on his behalf.—Medical Record.

Midwifery in India.—In a recent Government report Dr. Lawrie gives some interesting particulars of the practice of midwifery and of diseases of women and children in the city of Hyderabad, where it is almost entirely in the hands of uneducated dhais:

"To give an adequate idea of the barbarities habitually practiced by these women is impossible. We are able to judge of a few of them by the cases which from time to time came under our notice. In midwifery the treatment they adopt for cases of hand presentation is either to take a wisp of dry grass and set fire to it and burn the child's hand, in order to make it withdraw it into the uterus, or else to wrench it off. If post-partum hemorrhage occurs, the patient is made to stand up against a wall and an old woman butts at her abdomen with her head, like a goat. Numbers of cases of peritonitis and injury of the abdominal and pelvic visceras produced in this way come under our observation every year. The city dhais (midwives) have a superstition that breech presentations foreshadow evil to themselves, and hence the child is always born dead from asphyxia in breech cases. The manner in which counter-irritants are employed in the shape of the actual cauter}
bacillus, and subcutaneous injections of it instead of being followed by edematous infiltration with scanty leucocytes caused edematous inflammation with rapid and effective phagocytosis. Vincenzi also made guinea-pigs insusceptible of cholera by inoculating them with a few centimeters of blood drawn from a guinea-pig rendered immune in the way just described, but the immunity produced by the serum of vaccinated guinea-pigs lasts only a very short time.—*British Medical Journal.*

The Therapeutic Value of Calcium Salts.—Dr. Germain Sée advises the more general employment of calcium salts in medicine in preference to those of potassium or sodium. Iodide and bromide of calcium are especially useful, he says, when we desire to obtain the effects of bromine or iodine on the organism. They contain a greater percentage of iodine and bromine than any other salts, and furthermore, calcium has neither the often undesirable activity of potassium nor the inactivity of sodium. Iodide of calcium is well borne by the stomach when the potassium salt disagrees, and it is fully as efficacious as the latter in syphilis and in its action on the heart and respiration. Bromide and chloride of calcium are useful in a great many diseased conditions of the stomach, and in dyspepsia. They may also be substituted with advantage for carbonate of calcium when it is desired to restore lime to the organism, for chalk is absorbed with difficulty, the greater part of it passing away unchanged from the bowels.—*Medical Record.*

Chicago Drainage Canal.—The canal which is to take the sewage of Chicago toward the Mississippi and relieve the lake and the water-supply from the filth which is now poured into it in large quantities, has been formally begun. This canal will take from Lake Michigan 600,000 cubic feet of water a minute, which it is hoped will be enough to dilute the sewage sufficiently to make the region tolerable through which the canal will pass. From the point at which the Chicago River leaves Lake Michigan to the Union Stock Yards is about four and a half miles, and it is at this point that the canal will leave the Chicago River and run about thirty miles to the Des Plaines River, near Joliet. It is estimated that it will take four or five years to complete the work and that the cost will be from twelve to twenty million dollars. The drainage district will comprise the city and considerable out-lying territory.—*Boston Med. and Surg. Journal.*

Catarrh Snuffs.—Dr. Capitan, writing in *La Médecine moderne,* recommends the use of the following powder as a snuff at the beginning of a coryza:

- Tannin ................. gr. xv;
- Salicylic acid............... gr. xx;
- Salol . ................... 5 lí;  
- Boric acid ................. 5 lí.

This powder is irritating to the mucous membrane, and therefore ought not to be used after the first twelve hours. The patient may later use a snuff composed of equal parts of boric acid and Venetian talc. The following has been advised in cases of chronic coryza:

- Menthol .......... gr. x;  
- Sodium biborate, 1/2 n ........ 5 ss.
- Potassium chlorate, 1/2 n ........ 5 ss.

Treatment of Gastric Ulcer by Resorcin.—Dr. Frank M. Pope, in the Provincial Medical Journal for May 2, 1892, reports sixteen cases of gastric ulcer treated by this remedy, with excellent results. For the three prominent symptoms of gastric ulcer, fermentation, pain, and hemorrhage, the antiseptic analgesic and hemostatic properties of resorcin appear to be remarkably well combined. The drug is administered in five-grain doses, dissolved in one ounce of water, as far as possible on an empty stomach. The patient is kept on a milk diet, or, if vomiting is very constant, digested milk is sometimes substituted. The author has been able to dispense with nutrient enemata and suppositories. Rest in bed in the recumbent position is insisted on as an important factor in the treatment.—*Boston Med. and Surg. Jour.*

Duration of Treatment in Syphilis.—Dr. Heilmann has noted the time required, under different methods of treatment, for the disappearance of the first symptoms in syphilis. He compared treatment by calomel injections, mercurial frictions, and mercury by
the stomach in 843 cases of recent syphilis without complications and without previous treatment, and found the mean duration of treatment was 49.8 days. The smallest mean duration was 41.4, furnished by subjects ranging from sixteen to twenty years of age. For those between twenty-one and thirty years the average duration was 47.5 days. Women required a longer treatment than men. The average of treatment by calomel injections was 46.6, by mercurial inunctions 51.1, and by mercury internally 56.6.—Medical Record.

ON THE TORSION OF ARTERIES.—In connection with operations for excision of tumors, and other excisions of a like character, Jonathan Hutchinson remarks as follows: “I may mention that for many years I have quite ceased to use any other means for arrest of arterial bleeding than torsion. In excision of the breast, for instance, I do not think that I have during the last fifteen years ever used a ligature. The torsion is always effected by a pair of Well’s clamp-forceps, now in such universal employment. I am always extremely careful to close all vessels, keeping the wound exposed for a considerable time for that purpose. Very seldom indeed have I encountered any secondary hemorrhage.”—Columbus Medical Journal.

THE RETIREMENT OF SIR JOSEPH LISTER.—The eminent originator of modern antisepsic surgery, having attained the age of sixty-five, has been retired from his post as lecturer on clinical surgery at Kings College Hospital, London. The rule requiring his retirement on account of age has been commented on quite freely as an unnecessarily harsh measure, for the distinguished surgeon is no less capable and active to-day than when he was invited down to London. The hospital does not altogether lose his services, for by a special act of grace Lister will continue for a year longer to occupy his position on the attending staff.

CHRONIC CONSTIPATION.—Most purgative medicines, if used for any length of time, require their dose to be increased, and the habit of employing them is engendered. Cascara sagrada, on the other hand, can be prescribed with advantage in diminishing doses, and in time can be omitted altogether. Thus, a teaspoonful of the liquid extract, if given at bedtime, will cause action of the bowels after breakfast, which is accompanied by no griping and no intestinal nausea. The next night the dose should be 60 minims, the next 40, the next 30, the next 20, and afterward a 10-minim dose should be taken for eight successive nights. As a rule it may then be discontinued, as the action of the bowels comes on in a natural manner at the same hour of the day.—Charteris, London Lancet.

VOMITING OF PREGNANCY, when severe, is treated by Dr. Neichtoube in the following way:

Cocaine sulphat.................. gm. 1;
Aq. dest.......................... gms. 60.

Take ten drops. If necessary, repeat in an hour. If no effect is produced, repeat at the end of three hours. The following day give five or six drops three times, and keep it up until the vomiting ceases. At the same time apply to the vagina tampons covered with a two-per-cent cocaine ointment.

TREATMENT OF CHOREA.—Dr. Baumel believes in the great majority of cases of chorea the predisposing cause is anemia, the exciting cause being dentition, especially the evolution of the large molar teeth from the sixth to the fourteenth years. He uses the following:

Potass. bromidi.................. gr. xxx;
Syr. aurant. cort............... 1/3 j;
Aqua......................... 1/3 iij.

M. Sig: To be taken in the course of twenty-four hours.

In addition to this he gives one grain of reduced iron morning and evening, together with a tablespoonful of decoction of cinchona in a glass of sweetened milk.—Medical Record.

THE DISINFECTION OF CHOLERAIC DESTRUCTIONS.—Dr. Amos Sawyer, of Hilsboro, Ill., in criticism of a clause in the New York Board of Health’s circular of advice, that, namely, in which it says: “Pour boiling water on and put a strong solution of carbolic acid in the discharges.” Dr. Sawyer suggests the use of concentrated lye instead of boiling water, inasmuch
as the latter causes an upward current of air which may carry with it germs that have never come in contact with the boiling water, thus endangering the attendant's lives. He adds that it is practice to have his diphtheritic patients expectorate into such a solution.

The death of Dr. John James Reese, of Philadelphia, on the 4th ultimo, removed the veteran toxicologist of the University of Pennsylvania. He resigned in October, 1891, the professorate in medical jurisprudence held by him since 1865, and became professor emeritus. He was the author of a Manual of Toxicology, and edited the seventh edition of Taylor's Medical Jurisprudence. He was physician to St. Joseph's Hospital and other institutions. He was in his seventy-fifth year at the time of his death, which took place at Atlantic City.

Docking Horses.—There is a law in Massachusetts against the practice of docking horses, and the Society for the Prevention of Cruelty to Animals has succeeded recently in obtaining several convictions under its provisions. The law reads as follows: "Whoever cuts the solid part of the tail of any horse in the operation known as docking, or by any other operation performed for the purpose of shortening the tail, and whoever shall cause the same to be done or assist in doing such cutting, unless the same is proved to be a benefit to the horse, shall be punished by imprisonment in the jail not exceeding one year, or by fine of not less than one hundred nor more than two hundred and fifty dollars. One half of all fines collected under this act, upon or resulting from the complaint or information of an officer or agent of the Massachusetts Society for the Prevention of Cruelty to Animals, shall be paid over to said Society in aid of the benevolent objects for which it was incorporated." A similar law was also passed at the last session of Congress for the District of Columbia.

The Cow as an Enemy of Mankind.—In a discussion on tuberculosis in Chicago recently Dr. Robinson said that the death of babies who are fed by cow's milk is due to germs, and among these germs the tubercular bacillus plays a rôle. He said that it appeared to him that the home of the tubercular germ is in the cow, and that the bovine family is where the bacillus of tuberculosis finds its native living-ground. He believed that man gets the tubercular germs from this animal. If the people who have no cows are studied it will be found that they have less tuberculosis. The people who use the milk of the reindeer or the buffalo or the goat will be found with less tuberculosis than those who use the cow. The history of the association of man with the cow is, the speaker thought, the history of tuberculosis in man.—Medical Record.

Treatment of the Algid Stage of Cholera.—Dr. Mayhinder describes, in the Berliner Klinische Wochenschrift of September 5, 1892, the treatment employed with marked success by Dr. Giacich for cholera in the algid stage. His aim was to support the failing heart, and for this purpose he gave ammoniac internally and ether hypodermically, and also administered alcohol freely. Marked improvement in the general condition was noted within two hours after the institution of this mode of treatment, and over fifty per cent of those who had reached the algid stage were saved.

Resorcin in Malaria.—Dr. Samuel Wolfe speaks highly of resorcin in the treatment of obstinate malarial conditions. He gives it according to the following formula (American Therapist):

\[
\begin{align*}
\text{Resorcin} & \quad \cdots \cdots \cdots \cdots \cdots \cdot 5 \text{ gr}; \\
\text{Tr. eucalypti} & \quad \cdots \cdots \cdots \cdots \cdots 1 \text{ gr}; \\
\text{Syr. limonis} & \quad \cdots \cdots \cdots \cdots \cdots 1 \text{ gr}; \\
\text{Aqua} & \quad \cdots \cdots \cdots \cdots \cdots 1 \frac{1}{3} \text{ fl. oz.}
\end{align*}
\]

Sig: Teaspoonful three times daily.

Dog Meat.—A French paper says that the number of dogs slaughtered at the abattoirs in Munich has increased amazingly in the past few months. The taste for dog's flesh is said to have been imported by Italian laborers, who have recently come in large numbers to the Bavarian capital. The meat is not used only as an adulterant for sausages, but is eaten openly, under its own name, prepared in various ways.
THE AMERICAN PRACTITIONER AND NEWS

"NEC TENUI PENNÂ."

VOL. XIV. LOUISVILLE, KY., NOVEMBER 19, 1892. NO. 11.

Original Articles.

INCIDENTS IN THE HISTORY OF MEDICINE, WITH SOME OF ITS SUPERSTITIONS, VAGARIES, HERESIES, AND ABSURDITIES.*

BY T. B. GREENLEY, M. D.

There is some doubt in the minds of historians as to what country is entitled to the distinction of being the first to give birth to a system of medicine, but the consensus of opinion seems to be in favor of Egypt. This knowledge is derived mainly and most certainly from the Old Testament. We read in the Bible that when Jacob died, "Joseph commanded his servants, the physicians, to embalm Israel." Thus at the death of the patriarch, one thousand seven hundred years before Christ, Egypt possessed men who practiced the art of medicine.

But we have evidence of advanced conditions of civilization, arts, and sciences in this country a long time anterior to the date of Jacob's death; and it is claimed that she was the source that supplied the neighboring nations of antiquity with a knowledge of many of the arts and sciences.

To be sure, it is claimed by the Chinese that the art of medicine existed in that country even before the days of civilization in Egypt. They attribute the invention of medicine to one of their emperors named Haamti, who was the third of the first dynasty. He is said to have reigned two thousand six hundred and eighty seven years before Christ. Their system of medicine, both in theory and practice, may be said to be mere chicanery and absurdities. Knowing nothing of anatomy, they have paid no attention to the cultivation of the surgical art, and never undertake to perform any bloody operation. They do not even know how to reduce a hernia. Their surgical knowledge may be stated as embraced in cupping, acupuncture, moxa, plasters, lotions, and baths.

There is a very scant supply of Chinese medical literature. The Oriental Indians—East India—claim a civilization even more ancient than that of Egypt, and some authors go so far as to assert that the torch of civilization was obtained from their country by the Egyptians.

The Indians are divided into many castes, of which the most noble is that of the priests or Brahmans. These only have the privilege of exercising the functions of the priests and physicians.

Their medical knowledge is collected in a book which they name Vagadasastrin. This organon of medicine is divided into eight parts. The first treats of diseases of children; the second, of bites of venomous animals; the third, of affections of the mind, which are produced, as generally supposed, by demons; the fourth part is consecrated to diseases of the sexual organs; the fifth to hygiene and prophylactics; the sixth to surgery; the seventh to treatment of diseases of the eye and head; the eighth gives directions for the preservation of youth and the beauty of the hair.

They believe that all cutaneous diseases are caused by worms. According to them there are in the human body 100,000 parts, of which 17,000 are vessels; each one of these is composed of seven tubes, giving passage to ten species of gases, which by their conflicts engendered a crowd of diseases. They placed

*Read before the Hardin County Medical Society, 1892.
the origin of the pulse in a reservoir situated beneath the umbilicus. This reservoir was four fingers wide and two long, and divided into 72,000 canals, which were distributed to all parts of the body.

Upon a physician examining the pulse of a patient, he observed at the same time very carefully his countenance, believing that every change in the pulsation of the artery answered to a corresponding change in the expression of his face. He examined also the feces and the urine, consulted the stars, the flight of birds, the accidental incidents of his visit; he drew, in a word, his prognosis from a thousand different circumstances, but omitted those which alone could be available to him, to wit, the symptoms indicating the condition of the organs.

The following maneuver admirably illustrates the silly credulity or arrant charlatanism of the Hindoo physician. He let fall from the end of a straw a drop of oil in the vessel containing a specimen of his patient's urine. If the oil was precipitated and attached itself to the bottom of the vessel, he predicted an unfavorable result; if, on the other hand, the oil floated, he announced a favorable termination, from which, according to this method, an unfavorable prognosis must have been rarely made. It may be inferred, with ideas so ridiculous on the origin and diagnosis of diseases, that their therapeutics must have been miserable indeed. Nevertheless, we are assured that they were very successful in the choice of remedies, the proper time for their use, and in the manner of preparing and prescribing them. They are said to have had an ointment that caused the cicatrices of variola to disappear. They cured the bites of venomous serpents with a remedy the composition of which is unknown to Europeans.

In health and disease their attention was especially directed to the regimen. They observed in their persons and every thing about them a minute and even excessive cleanliness. They pretended that their science is derived directly from heaven, and it is owing to this belief doubtless that they have not made any improvements on it for thousands of years.

"The writings of Moses afford us a precious monument" pertaining to the knowledge of medicine existing among the Hebrews at the time of the exodus, being about one thousand five hundred years before Christ. Moses had a very good code on the subject of hygiene, both as it pertains to the cleanliness of person and the character of the regimen. The physicians among the ancient Hebrews were held in high esteem by all classes of the people, perhaps more so than in any other country. We have it stated in the Old Testament that this honor was awarded them even by the king. In Ecclesiastics, chapter 38, verses 1 to 4, we have the following passages:

"Honor the physician, because he is indispensable, for the Most High has created him.

"For all medicine is a gift from God, and the physician shall receive homage from the king.

"The science of medicine shall elevate the physician to honor, and he shall be praised before the great.

"The Most High has created the medicines out of the earth, and he that is wise will not abhor them."

The history of medicine, as it pertains to ancient Greece, preceding the Trojan war, is mostly mythological and traditional, and to some extent derived from other countries. These dim lights and mystical traditions are fully and ably set forth by the learned Daniel LeClerc. He names more than thirty gods or goddesses, heroes or heroines, who were supposed to have invented or cultivated, with distinction, some of the branches of medicine. He neglects nothing in the hope of shedding some light on the chaos of improbable or contradictory traditions; but his praiseworthy though unfruitful efforts have not drawn from them any valuable truths nor well-established facts.

"Melampus is the first of the Greeks following the chronological order who immortalized himself by extraordinary cures, and to whom, from gratitude, altars were erected. He lived in the time of Proetus, king of Argos, nearly two hundred years before the Trojan war.

"The most famous of the cures attributed to Melampus were those of the daughters of Proetus. These princesses, who had taken vows of celibacy, became subject to fits of hysteria or monomania, during which they imagined themselves transformed into cows, and would leave the place to run wild in the forests, lowing like those animals.
"This nervous affection was communicated, sympathetically, to other women of Argos, who followed the Proetides, imitating their deranged conduct.

"The shepherd, Melampus, having observed that his goats purged themselves by eating white hellebore, gave his young patients milk in which the plant was infused, and then caused some robust young boys to chase them over the fields until they were thoroughly fatigued. Then he enchanted them and made them bathe in a fountain of Arcadia, called Clitorian, which completed their cure."

Esculapius, of all the disciples of the celebrated hermit, Chiron, was the most eminent in a medical point of view. Several cities of Greece have contended for the honor of his birthplace, but the general opinion is that he was born at Epidaurus, a city of Argolis. Esculapius obtained in antiquity nearly a universal veneration. His worship, which passed from the Greeks to the Romans, extended into all countries penetrated by the arms of these two nations. Temples were erected to him in various countries, and miraculous cures were attributed to his great skill in medicine.

It is said that he brought to life so many of the great men of Greece that Pluto, alarmed to see the number of new arrivals to his gloomy kingdom diminishing day by day, complained to Jupiter, who destroyed the audacious healer. On this account, says a wit, the modern children of Esculapius abstain from performing prodigies. But the witty writer forgot that there has always existed, and still exists, a class of self-styled physicians who have never ceased to perform miracles. Such were, among others, Asclepiades of Bythinia, who resuscitated a corpse in a public place in Rome in open day; Paracelsus, who boasted of keeping in a vial a living little man manufactured by himself; Robert Fludd, the oracle of modern theosophs; Mesmer, the magnetizer, and his adepts. And still later we have the Christian scientists and clairvoyants, or trance women; the Doctors Flowers; the Drs. Kennedy, surgeons, with their twenty-six doctors; the advertising free doctors; quacks, *genus id omne.*

Esculapius left two sons, who were both physicians and soldiers; they fought at the battle of Troy. Their names were Machaon and Podalirius. His two daughters, Hygeia and Panacea, express the one health and the other a remedy for all diseases. Machaon and Podalirius, as before remarked, served in the capacity of both surgeons and warriors. The first fell before the walls of Troy; the latter survived the war and performed the first venection on the daughter of the king of Caria, who had fallen from a house-top. She was insensible and regarded as being dead, when the doctor opened the veins of both arms and revived her.

The history of other nations offers nothing peculiarly remarkable in a medical point of view. All that can be affirmed of each one of them is, that just as far back as we can go in their annals we find some vestiges of medicine. But in the primitive period of the world's history in most of the nations the practice of medicine was mainly confined to the priesthood. The same thing holds good as it respects the aborigines of the new world. The Spaniards found Montezuma cultivating large gardens of plants for medicinal purposes. Cortez was restored to health from a severe and dangerous disease by the Mexican physicians. And no doubt Pliny was correct when he said that no nation ever existed without some knowledge of medicine.

If we should ask how and why the use of medicine originated, we should answer by "natural instinct." The aversion to suffering from pain and disease naturally called for a remedy. Instinct originally was also brought about by many other things essential to our comfort and welfare. These instincts might be illustrated in many ways, but space will not permit.

Fifty years after the destruction of the kingdom of Priam, there was built at Titamus, in Peloponnesus, the first temple in honor of Esculapius. Very soon the worship of this god was spread throughout Greece, whence it passed into Asia, Africa, and Italy.

In the temple of Epidaurus there was a statue of colossal size, representing the god of medicine under the figure of an old man seated on a throne, holding in one hand a scepter and resting the other on the head of an enormous
serpent. A dog, an emblem of vigilance, re-
posed at his feet. Socrates, in his last discourse
with his friends, requested them to offer a cock
as a sacrifice for him to Esculapius; whence
we infer that this bird was sacred to the god of
medicine. The priests attached to his worship
were named Asclepiades, a word which signi-
fies descendants of Esculapius.

The people came from all quarters on pil-
grimages to the temples. Knowing the great
influence of the morale on the physique, these
priest-doctors employed every means to control
the imagination of their patients. Sometimes
the god spoke to them in a mysterious manner,
sometimes he appeared in the form of a serpent,
again he manifested his will in dreams, which
were interpreted by the priests. The patients
who recovered went home blessing the divine
author of their recovery, and leaving behind
them testimonials of their gratitude. The
priests kept tame serpents about the temples
to excite the wonder and superstition of the
people. It is related by Aurelius Victor that
during the three hundred and fiftieth year of
the foundation of Rome the city was ravaged
by a terrible pestilence. The Senate sent six
deputies to consult the oracle of Ephesus.
After they had arrived at the temple, and were
admiring the colossal statue of the god, sud-
denly an enormous serpent issued from beneath
the pedestal. The sight of it impressed every
mind more with veneration than terror. He
moved tranquilly through the astonished crowd
and entered the vase of the Romans, in the cham-
ber of Ogulmus, chief of the ambassadors. The
serpent reptile was piously borne away, and when
the vessel of the ambassadors was approaching
the city of Romulus he sprang into the waves
and swam to an island in the Tiber. A temple
was immediately erected to Esculapius on that
spot, and the pestilence ceased.

We have accounts of many miraculous cures
effected by the practice in the temples, such as
blindness, vomiting blood, pleurisy, etc.

The ideas of the ancients in regard to pathol-
ogy necessarily were very crude. They viewed
man as a little universe, and divided him into
many regions and departments, which were
supposed to be governed by spirits of different
orders. They appeared to pay but little atten-
tion to morbid phenomena, but contented them-
selves to observe which remedies healed cer-
tain diseases, and to employ them after the
same manner in like cases. This instructive
empirical view still exists among the people,
many of whom are always ready to give coun-
sel to the sick. It is a common expression with
them, "I have known a disease similar to this
cured by such a remedy."

The philosophy of Pythagoras in some re-
spects was so grand, and denoted such advanced
powers of the mind at his period in the world's
history, that we can not refrain from making
a quotation, especially when we consider how
many of his disciples became so eminent in the
medical world. "All animals and plants are
only modifications of an original animal or veg-
etable. Man is the point of union between di-
vinity and matter, connecting heaven and earth.
The light of wisdom and intelligence that
beams in his thoughts is reflected on nature.
He is the bond of communication between all
beings. There may have been a time when
the insect, the shell-fish, or the unclean reptile
knew no master in the universe, and found
itself at the head of organized beings. Who
knows if in the eternal night of ages the scepter
of the world shall not pass from the hands of
man into those of a being more perfect and
worthy to bear it. It may be that the race of
negroes, now secondary, was once the ruler of
the earth before the white race was created.
If nature has successively accorded empire to
the species more perfect which she has created,
why should she stop now? She is ruled by
God alone, and it is His might and hand that
governs her."

It was the followers of Pythagoras "who
first introduced the custom of visiting their
patients in their own houses; that they went
from city to city and from house to house ful-
filling the duties of physicians as is done at
present. They were called periodic or ambu-
licant physicians, in opposition to the Asclepiades,
who were consulted by and treated the sick
only in the temples."

Hippocrates was born in the Isle of Cos, four
hundred and sixty years before Christ, of a
family in which the practice of medicine was
hereditary. They pretended to trace their an-
cestry on the male side to Esculapius, and on the female side to Hercules. It is said he was the author of more than fifty volumes on various medical subjects, but perhaps this is an exaggeration. However, there are extant at present some ten volumes of his works which are regarded as genuine. It is said many books were published in his name fraudulently in order to give popularity to the works.

His works serve as a chain to bind the doctrines and discoveries of ancient medicine to the doctrines and discoveries of modern medicine.

It is claimed that Hippocrates never dissected a body or owned a skeleton, although he discourses on anatomy in his writings. By his teaching and writings Hippocrates instilled new life into the progress of medicine, and it may be said he almost erected it into a science.

The theory which prevails the most universally in the Hippocratic works is that of coction and crisis. It is met with at every step, sometimes isolated, sometimes combined with others, but especially is united with four elements and four humors.

The elements consist of heat, cold, moisture, and dryness, and the four humors of the blood, phlegm, bile, and atrabile. This last was rather a spirituous or mythical element. Through the agency of these, coction and crisis were brought about.

Empedocles, of Argentum, was the first who introduced into physics the consideration of four elementary forms, the first termed terrestrial or solid, the second aqueous or fluid, the third aerial or gaseous, and the fourth igneous or ethereal. He also contended that two principles existed in every thing; the one active, intelligent, and impalpable, which is God; the other passive and devoid of properties, called amorphous matter.

The doctrine of the elements and humors, as enunciated by Hippocrates, descended down to the time of Galen, who perfected it, and it continued to exist for many centuries after his time.

The theory of fluxions in the days of Hippocrates seems to be very absurd. It was contended there were seven species. The first tends to the eyes, the second the nose, the third to the ears, the fourth to the chest, the fifth to the spinal marrow, the sixth to the vertebrae and general tissues, and finally the seventh, which flows slower than any other, producing sciatica and rheumatism. In this way the origin of all diseases was explained.

Although the four elements theory seemed to be well established, some contended they might be reduced to two. A little work entitled "The Origin of Man," contended that fire and earth alone were entitled to the distinction of elements. On this hypothesis he based his idea of physiology as follows: "The earth after a long time becoming dry, a mould was formed on it, as is often on old clothes, and after another very long lapse of time, what there was of fat and moisture in this mould, proceeding from the earth, being at last burned, formed bones. That which was sticky and contained the cold element could not burn though made hot, nor become moist. It then took a form different from the rest, and was developed into solid nerves, for there was no cold in them. The veins required much of the cold element. The exterior part of this element, acted upon by the heat, formed a dense envelope and became a membrane. The interior of the veins, melted by the heat, became liquid. In this way in man and in other animals the windpipe, the stomach, the abdomen, and intestines all became hollow.

"The cold element continually growing warmer, the exterior was burned and became an envelope or membrane; the interior cold that existed, being neither fatty nor viscous, became humid, and was changed into a liquid. The brain is the center of the cold element; the fat, that of heat.

"The veins that come from the belly and the intestines continually attract or absorb what is thinnest and most liquid in the food and drinks. After the mixture has become heated the grossest remains and becomes excrement, and passes to the large intestines. The nutritive substance reaching the various tissues is distributed, furnishing to each what is to be permanent of its structure. These tissues, moistened by the nutritious juice, all grow by the cold, hot, viscous, fatty, sweet, and bitter elements."
He now comes to the generation of man, which he explains as follows: "The mixture of semen is vitalized by agitation, and it draws its nourishment partly from different aliments and partly from the air that penetrates the body of the woman. At first the mixture is entirely homogeneous, but becomes swollen and rarefied. It is next dried by the action of heat, which renders it firm and consumes its internal humidity. That which is more firm in its nature becomes compact and dry, and still being acted on by heat, it hardens and forms what are called bones and ligaments. Fire thus effects all the changes in the body, according to the structure of each part, by means of its effects upon moisture."

This quotation is made as a curiosity, and to illustrate the evolution which has since taken place. [TO BE CONTINUED.]

INFLUENZA.

BY E. S. M'KEE, M. D.

Among the many ingenious hypotheses put forward to account for the origin and spread of influenza, it is interesting to observe that one which approximates, to a certain extent, the doctrines of those early Italian physicians who assigned a name which has the merit of vagueness and nescience, and for which we seem to have found no better. There seems something still to be said for an extra mundane origin of this mysterious affection. Willis suggests that this disease, which visits so suddenly and simultaneously so many parts of the earth, may take its rise in the intrusion into the atmosphere of some poisonous gas of such density as to penetrate everywhere.

Influenza or la grippe is, according to M'Kee, rather better termed a pandemic than an epidemic, which passes over the earth from east to west, regarding not climate, class or society. The Indians of Alaska were reported dying in large numbers during the past year. In Austria were reported 2,823 deaths from influenza during the epidemic of 1889-90; 930,478 applied for medical relief, but of course a large number did not call in a medical attendant. An interesting article discusses the various names of this malady, which are found peculiarly expressive in the various languages. An interesting study of the various pandemics of influenza is worth recording.

Lee reports 1,120,000 cases in Pennsylvania during the recent epidemic, of which 7,880, or one in every 142 cases, died.

The etiology of influenza, according to Tizzier, is a microbe, which he styles the streptobacillus, whose habitat is putrid mud. That Russia is its home is, in his opinion, due to the fact that bad drainage, filthy streets and neglected barnyards are the rule, a condition particularly aggravated by swollen rivers and generally wide plains.

The depressed tone of human vitality during the influenza epidemic is discussed in a report by Coulston. Whether the lowered tone of vitality was due to the influenza, whether the European humanity was in a lowered state of vitality, thus being a fit nidus for the influenza germs, or whether it was the sunless, summerless general character of the year, Dr. Coulston could not say. He distinctly connected the influenza with the number of melancholic patients sent to Morningside Asylum. He believes the influenza left the nerves of Europe in a far worse state than it found them. It would be well for asylum superintendents to look into this matter a bit.

Faits Gleaned from Last Year's Grippe, is the title of a valuable article in which the statistics furnished by medical officers of the United States army are collected. Stevens found its prevalence proportional to the increase in weight and humidity, and inversely to the amount of ozone and the electrical condition of the atmosphere. In view of the intense nerve depression, the too popular antipertoneal treatment is unwarranted and unscientific. Fatal prostration and heart failure in grippe are probably due more often to drugs than to the disease itself.

In a study of influenza, as occurring in Russia, Siegfried refers to the water supply of various cities and mills where large numbers were employed. It was found that those drinking artesian water were immune, or remained so, till the disease was introduced from without, while those drinking surface water were readily affected.
Transmissibility has received an impetus from the observation that the course of influenza was independent of and quite opposed to the prevailing winds. It traveled slow in Siberia and Russia, but rapidly, as soon as it reached the network of railways, in central and western Europe. Its course was changed by the mountain ranges of Scandinavia, and it invaded Norway, not from Sweden, but from Holland and England. Again it was deflected by the Carpathians, turning its course in the channels of travel down the valley of the Danube, and ultimately following in direction and time the ocean routes to Africa, India, Australia, and America. In India it has shown the same peculiarities of following the railroad lines as with us.

Influenza communicated to cats and quite a number of human beings from a horse is reported by Caird.

Prophylaxis has been successfully carried out by Gilbert by the use of quinine and arsenic. He used these remedies in a number of patients, none of whom were attacked. He observed that nine children in one family were attacked with influenza, one only escaping, who was taking arsenic for a skin affection. He thinks it reasonable to suppose that these two powerful antiseptics might prove iminical to the development of the microbe which probably caused influenza. It is also reasonable to expect that these drugs would fortify the system against the disease.

Immunity against influenza furnished by vaccination is reported by Goldschmidt, whose observations were in the island of Madeira, which suffered from a double invasion of smallpox and influenza. He found that no one of one hundred and twelve persons successfully revaccinated suffered from influenza, and of ninety-eight persons, in whom revaccination did not take, only fifteen had any symptoms of the disease. In an isolated villa of twenty-seven inhabitants, twelve who were vaccinated escaped the disease, while fifteen who were not vaccinated all suffered from la grippe. The doctor believes that the immunity generally enjoyed by young children in epidemics of influenza is due to the first vaccination, which has not yet had time to become dissipated.

Van Eman is led to the belief that one attack of la grippe tends to a certain amount of immunity against others, but admits that this has numerous exceptions. He is strongly inclined to the opinion that cases of inipient or developed phthisis undergo rapid changes for the worse after an attack of la grippe.

The epidemic among children is discussed by Comby, who says forty per cent of the children of Paris were affected by this disease. 218 came under his observation; 124 were girls and 94 boys. They ranged from seventeen days to fifteen years of age. He thinks the disease infectious, being diffused by atmospheric currents. Its contagiousness, he thinks, is not clearly established, though probable. In only one case was there a fatal issue. A child born with influenza is reported by Townsend. The mother had an attack on January 2d, lasting three days. The child was born January 9th. It succed violently, and the same day its respirations reached 100; second day, temperature 104° F., pulse at least 200, respirations 120–160. He discusses in support of his view the case reported by Barber.

The relation between influenza and pneumonia is discussed by Simon. He finds that in those cases where the attack was not very severe, and the patients insisted on going out while still weak, though the temperature was still normal, there are found on examination sticky crepitant râles at the base of each lung. Patients walking about with these râles and with the pulmonary condition causing them, will be specially liable to get pneumonia if exposed to chill or fatigue. This fact will go far to explain why it is that so many bad cases of pneumonia occur among men in the prime of life, who have, as they have thought, recovered from slight attacks of influenza. The materials for the production of pneumonia are latent, and need only the influence of cold and exposure to develop the disease in the body already weakened by influenza.

Menstruation as affected by influenza is described by Mijulieff, who noted that in women menstruating during an attack of influenza the flow was more profuse and prolonged. In a case of amenorrhea the flow reappeared after an absence of four months; in another it ap-
peared for the first time during the attack. No special treatment was indicated. The increased flow must be explained as due either to an acute endometritis or to the presence of pathogenic micro-organisms in the blood, introduced through the respiratory tract, which give rise to certain vaso-motor disturbances, which may lead to hemorrhages in other organs besides the uterus. It is possible that the microbes may generate ptomaines, which exert a direct irritant action upon the vaso motor system.

Hyperpyrexia is reported by Gibson. Several cases are mentioned, reaching 107°, 108°, and 109° F. One patient was saved by the cold baths.

Aural complications are the subject of a report by Meniere, who states they are the result of retro naso affections. Of fifty-seven cases twenty-three lasted four or five weeks. In eleven cases the lesion was unilateral, in seventeen bilateral. In another series of sixteen cases nine were unilateral and seven bilateral, and the duration of the disease three months. Eight lasted four months, and five were still under treatment by reason of complications, as periostitis and mastoid inflammations. The treatment consisted of warm water, irrigation in the external canal and in the eustachian tube, paracentesis of the membrana tympani in some cases, and in four instances thermo cautereization of the mastoid.

Ludwig found that influenza induced a large number of cases of otitis media. He found otitis subsequent to influenza sometimes a malignant and life threatening disease, which, in conjunction with pyemia and meningitis from empyema of the frontal sinuses, presents the most frequent cause of death after pneumonia.

The ocular phenomena observed in the course of la grippe are described by Macnamara. He has met four cases of optic neuritis, three in males. These troubles could not be attributed to any other disease in the world than la grippe. Five cases of retro-ocular neuritis are reported by Epiron, which occurred as sequellae of influenza. Three cases of ocular complications are reported by Ray; and Honsen reports a case of acute retro-bulbar neuritis; Laibach, a case of a young lady who suffered from influenza, with severe hemianopia dextra, whose eye-lashes on the right eye-lids turned perfectly white on leaving her couch.

Multiple neuritis after influenza is reported by Westphal. Two cases are described; in one the first symptoms were manifest seven days after the commencement, in the other eight. The first patient was aged twenty-nine, and complained first of a feeling of numbness and pain in his toes and fingers, subsequently weakness of the limbs, with difficulty of swallowing, abolition of the knee-jerk and the triceps-jerk; retention of the abdominal, the cremasteric, and the plantar reflexes, with slight paralysis of the right side of the face. Under appropriate treatment the symptoms promptly disappeared, but the knee-jerk remained absent for several months. The symptoms in the second case were more severe, and were ushered in by an attack of urticaria. In the course of a few weeks there were general muscular weakness, paralysis of one side of the face and paresis of the other, difficulty in swallowing, and abolition of the knee-jerk, pain on pressure over the affected nerve trunks and muscles, wasting of muscles both in the upper and lower extremities, and the reaction of degeneration preceded by an increased electrical irritability. Two similar cases are reported by Honsen occurring in brothers.

Influenza psychosis is the subject of an article by Jutrosinski, who points out that no mention of a true psychosis produced by influenza is made till Rush's account of the influenza as it appeared in Philadelphia in 1789-91.olly, of Strassburg, observed three groups of mental diseases produced by influenza, acute delirium, delirium tremens, and genuine insanity. The etiology of influenza-psychosis is the same as the etiology of mental complications in other febrile diseases, viz.: abnormalities of the circulation, hyperemia or anemia of the brain, the production of ptomaines, etc. The excessive use of antipyrine or anti-febric has also undoubtedly been a factor in many cases. He thinks mental diseases are produced by influenza in individuals with nervous dispositions. Insanity can originate in every stage of influenza; however, patients at the period of convalescence are most frequently attacked. All forms of mental diseases can appear; the major-
ity show a melancholic-hypochondriacal character. Both sexes are equally attacked. Patients from twenty to fifty years of age are most frequently affected. Influenza in patients already insane produces a deterioration of their mental condition.

King mentions a case in which extreme head pain, with acute vomiting and constipation, were followed by squint, dilated pupils, stupor, and an epileptic attack. All passed off and the boy is now quite well. One case in which a semi-cataleptic condition occurred was mentioned. Colly reports a case of Basedow's disease following influenza.

Tenonitis following influenza is reported in four instances by Fuchs. Henry met with only one case previously in his experience. Fuchs could not but consider that these cases depended on the influenza. In two of the cases the pneumococci of Fränkel - Weichselbaum were found in cultivations made from the secretions. One case went on to suppuration.

A case of meningitis of influenzal origin is reported by Blomfield; at least this is the best description he can give it. Also one by Woodbury.

The digestive organs are, according to Nicholson, frequently affected. Vomiting is frequently present, especially in the commencement. Diarrheas occur in eight or ten per cent. Atonic dyspepsia, from which the patient may have been free for years, is often recalled into existence. The urinary organs usually escape complications. Scanty, high-colored urine is the rule, and occasionally a little albumen, but nephritis or permanent kidney trouble would seem to be rare if ever seen. Hematuria now and then occurs, but is rarely serious. Severe menorrhagia is occasionally the result of influenza, but it would seem to have but little tendency to produce abortion.

The treatment of influenza-neuralgia by sweat baths is reported on by Frey. He used simply the steam or hot-air baths, and found the best results in the ordinary typical forms of neuralgia, better results being obtained in recent cases. He thinks there is a strong analogy between malarial and influenza neuralgia. Believing influenza due to a specific micro-organism, he questions whether the neuralgia occurring with it may not be occasionally in the nature of an infectious neuritis.

The following prescription is highly recommended by Palmer, of Louisville:

Salol.............................. 3ij;
Phenacetin........................ 2ij;
Quinca-salicylate.................. 2j.
M., fecit caps. No. xx. Sig: one every three hours.

Emmerson has found nothing better as an antipyretic and analgesic than phenacetin or phenacetin and salol in combination. He gave ten grains of phenacetin or five grains of phenacetin and five grains of salol, or two and one half grains each every three hours. It is rarely necessary after that time.

Phenacetin is warmly recommended by Clemmon, who has used it in from 4-10 grains. The second dose is given an hour after the first, then repeated every four hours if the patient is not relieved. Similar results are reported by Henry.

Laffont advises as a rational treatment of influenza gentle purgatives, diaphoretics, revulsives, and strong tonics.

That influenza is a paresis or partial paralysis of the pneumagastric nerve, depending probably on such a change in the atmosphere as involves an increased expenditure of force in maintaining circulation and respiration, is the idea advanced by Morris. Hence follow the phenomena of cardiac failure and pulmonary congestion, which we too often witness, or the gastro-intestinal troubles, or the intense neuralgias. He finds from a logical sequence that the best remedies are strong excito motor stimulants, chief among these strychnine, caffeine, alcohol, and ammonia. Since he adopted the above views, and treated his patients with 5-10 drop doses of tincture of nux vomica every three or four hours, he has often been surprised at the promptness with which they have rallied and the almost unfailling success of the method. He strongly urged this means of treatment, especially with patients below the par of vital activity.

A single inhalation of a two-per-cent solution of ichthyl has given great relief in the hands of Lorenz. A steam spray apparatus was used, and it was repeated twice a day for twenty minutes at a time. In addition to this
ichthyol was ordered internally in the form of pills, containing a grain and a half each, one to five being taken daily; also a vessel containing a two-per cent solution of ichthyol was kept in the room, and from time to time made to boil by the use of a spirit lamp under it. In almost every case the symptoms are said to have entirely subsided in two or three days, but if the treatment were left off then the cough and running at the nose were liable to recur.

Bruce sends the patients to bed, provides a good nurse, warmth, and rest, and feeds them freely fluid diet, highly nutritious and stimulating; for the first few hours orders 10-15-grain doses of salicylate of sodium. As soon as the pain is gone, drop that and put the patient on free doses of quinine or cinchona.

Wallian considers an efficiently managed Turkish or Turko-Russian bath at the onset one of the promptest measures at command. It relieves congestion, causes rapid elimination, and equalizes the circulation. Few patients are too weak to bear this treatment. The bathroom should be large, airy, and free from curtains, plush furniture, etc. It should be disinfected, preferably with peroxide of hydrogen, which is to be thoroughly sprayed about the room every two or three hours. It not only disinfects, but also liberates free oxygen in an extremely active or ozonized condition. Add to this free and frequent inhalations of pure oxygen to the extent of fifteen to twenty-five gallons per day.

CINCINNATI.

Societies.

THE LOUISVILLE MEDICO-CIRURGICAL SOCIETY.*

Stated Meeting October 14, 1892, Dr. F. C. Simpson, President, in the chair.

Dr. C. Skinner: I exhibit here a leg removed to-day from a man seventy-two years of age because of sarcoma. The man gives the history of having a fall during the month of February, 1893, spraining his knee. You will notice I made an incision above the knee, and a great quantity of very soft, friable tissue was re-

moved. From the appearance at first it seemed to be a typical case of osteo sarcoma, but the bone proved not to have been involved. Of course had it been osteo-sarcoma the leg would have been taken off at the hip, but as it was simple sarcoma, I amputated just above the middle third of the thigh. The man reacted well, pulse went down to about 40, but in an hour or so he had rallied, and the pulse went up to 100. There was very little hemorrhage during the operation except by oozing. This growth was first noticed in July last, and has developed very rapidly since; at the time of operation the tumor was enormous. The man has had no fever nor pain, excepting some slight shooting pains from the growth within the last few days. Operation done this morning at ten o'clock; he was doing well this afternoon.

Dr. T. S. Bullock: I have nothing to say concerning the case except that the man had a very bad heart, irregular pulse, and took chloroform rather badly. When Dr. Skinner first cut into the swelling there was such a gush of blood that I thought he had gotten into an aneurism sac. After the tourniquet was removed the oozing increased, and for this reason the man was kept upon the table longer than he would have been under other circumstances. At one time I feared we would not get him off the table alive; he became pulseless at the wrist, but by elevating the foot of the table and giving a hypodermatic injection of ether and another of whisky, and using some nitrite of amyl, he reacted very nicely.

Dr. J. W. Irwin: I think the operation is a very judicious one, and where it was done makes it about as safe as any thing of the kind could be. I am inclined to the opinion that the man will live some time before he has a recurrence of this trouble.

Dr. W. L. Rodman: The case, so far as I know, is rather unusual. Sarcoma is apt to occur more frequently in the first half of life than in the last half. It is rather uncommon in a man seventy-two years of age, especially in this location. In my experience I have only seen one sarcoma of the soft parts, and that was in the thigh of a man fifty-five years of age. Osteo-sarcoma occurs most frequently

*Stenographically reported by G. C. Mapes, Louisville, Ky.
in patients from twenty-eight to thirty-two years of age. Of course they occasionally occur in older subjects, but the average is between the ages of twenty-eight and thirty-two. I would like to ask Dr. Skinner what variety of sarcoma this is.

Dr. Skinner: No microscopical examination has yet been made.

Dr. Rodman: I have here two specimens, one of which I showed a few evenings ago at a meeting of the Surgical Society. It is a small, imperfectly developed, retained testicle removed from a young man, twenty-six years of age, who is large and well developed, weighing one hundred and eighty to one hundred and ninety pounds, and yet he had this very small, imperfect testicle. He was ruptured on the right side, and had been wearing for six or seven years a double truss. This truss, on the right side, probably subjected the testicle to a great deal of pressure, as it was situated just to the left of the external abdominal ring. This may account for the cystic change in the testicle. The cord was very short and would not allow the testicle to be brought down into the scrotum, even if it had been a perfect organ. I believe that the majority of incarcerated testicles are imperfect organs, and functionally inactive, and the best thing to do is to remove them. However, when they are in the abdominal cavity they may be functionally active, and their removal would not then be advisable. This operation was done about a week ago, and the dressings were changed for the first time to-day. The wound was closed by continued buried suture. The patient’s temperature never went above normal, pulse never below 60, and there has not been a drop of pus.

No. 2. This specimen is a penis removed from a man about seventy-three years of age, giving a history that nearly twenty months ago he noticed a small wart on the glans penis. The man was a patient of Dr. Peyton’s, and I saw him for the first time in consultation two days ago, and advised early amputation of the penis, which was done yesterday. You will notice quite a large wart right under the glans, which was as hard as a rock when it was removed. There were also enlarged glands in either inguinal region, which were carefully dissected out. The penis was entirely covered by a flap of skin. It looks very much like the natural organ, except, of course, it is very short. I would like to ask Dr. Palmer if he would have advised amputation in spite of the fact that the man had excessively enlarged glands on both sides.

Dr. E. R. Palmer: A gentleman asked me to-day in my office if I had ever amputated a penis, and I said no. I suppose my experience is peculiar in that respect. A patient was brought to me some years ago by Dr. Lowry, of Shelbyville, suffering from cancer of the penis, at least that was the diagnosis. I could not see that it was cancerous at all, and disappointed the doctor as well as the patient by not amputating the organ. I am ready to confess that I have had no experience in the matter of cancer of the penis or amputation of the organ.

Dr. Skinner: When did the glands begin to enlarge in the groin?

Dr. Rodman: It has been four or five months since he first noticed the enlargement; they have been growing very slowly.

Dr. Skinner: I think amputation of the organ entirely justifiable.

Dr. Rodman: I will simply state in closing that I thought possibly there might be some criticism on the operation being done. I have seen one case in which there were excellent results following amputation of the penis, and there has been no recurrence of the growth, notwithstanding the fact in that case, as in this, the enlarged inguinal glands were on the left side. Operation was done eighteen months ago, and there has been no recurrence.

“A Cause of Prostatitis” was reported by J. W. Irwin, M. D.

“I do not intend to speak of the general causes of this disease; my remarks will only apply to prostatitis following bicycle riding.

“Within the last eighteen months five cases of prostatitis have come to my notice, which could be traced directly to the pressure on the prostate gland by the saddle of the bicycle. Four of the subjects have passed the years of middle life, and one is in his teens. In all cases the phenomena presented by them were very similar in character, and a general description of the cases will, I hope, suffice.
"After riding the bicycle for a few hours, during the act of micturition a feeling as though the vesical end of the urethra was raw was experienced; then a full feeling behind the scrotum came on, which was unattenuated by pain. Inordinate and persistent erection of the penis, coming on at short intervals and lasting three or four days, was the most unpleasant feature observed. The urethra during the act of micturition felt raw and tender under pressure; weight, and some dull pain was felt in the testicles. There was no discharge from the penis at first, but after two or three days a little moisture was observed coming from the meatus urinarius. The discharge seemed to be very thin and colorless. The desire to void the urine more frequently than normal was present while the trouble lasted.

"The treatment advised was saline laxatives, and the free use of water internally. For relief of troublesome erections of the penis monobromide of camphor in large doses was advised. This course of treatment, together with the removal of the cause, gave relief in from five to seven days.

"In presenting this report for your consideration, I do so believing that others have observed similar phenomena following the use of the wheel-horse.

"When time, which regulates the fashion of the hour, has been consulted, who knows but one of the most annoying troubles which the male subject has to bear may be brought on prematurely by pressure of the bicycle saddle on the prostate gland?

"Certainly urethritis, extending into the bladder, has resulted from its use in the cases reported."

DISCUSSION.

Dr. T. S. Bullock: I have heard some talk about urethritis and prostatitis resulting from bicycle riding, but I have never seen such a case myself.

Dr. Palmer: Within the next two or three years I believe we will see a great deal in the medical journals, editorially and otherwise, in reference to the effects of bicycle riding upon the sexual apparatus and sexual powers. Given a man with absolutely sound sexual organs, I can imagine that he might possibly withstand the injurious effects of bicycle riding. At the last meeting of the State (Kentucky) Medical Society I cited three cases of prostatic trouble that I could not account for, except by referring to previous damage on one hand, and to the immediate injury of bicycle riding on the other. In that paper I made the statement that albuminuria as a cause for rejection for life insurance was partly referable in these cases to bicycle riding. I believe that any man who has had an attack of gonorrhea, extending over a period of three or more months, with prostatic infection, the prostatic sinuses being involved, and then gets well, endangers himself by riding a bicycle. A gentleman, weighing probably two hundred and thirty pounds, consulted me within the last ten days, complaining of a peculiar burning sensation during the act of micturition, with also a slight discharge from the urethra, which I think was directly referable to bicycle riding, and this is only one of a number of cases of the same character that I have seen.

I think much of this trouble could be avoided if the bicycle saddles were properly made so as to relieve the pressure upon the prostate. They should be wider, with a wider gap or slit in the middle. As you probably have observed, there has recently been a marked improvement in this direction.

Dr. Skinner: I think a great deal depends upon knowing how to ride a wheel. In my opinion these prostatic troubles will either be found to be old prostatic troubles re-excited, or else the riders are beginners. I would like to ask Dr. Irwin if he has any history as to the length of time these men had ridden the bicycle before they came to him as patients.

I do not see why, with the seat properly adjusted, there should be any pressure upon the prostate.

Dr. Bullock: I believe that Dr. Skinner is correct; if the saddle is properly pitched, we will not have any trouble. I do not deny that trouble will occur if the saddle is improperly placed.

Dr. H. A. Cottell: I am glad to see this subject brought before a medical society for discussion. We have heard for several years that bicycle
riding produced albuminuria, but I have never seen any thing like statistical proof of it. However, I have been forcibly reminded of the fact by some recent experience. I have examined several young men for life insurance, in whose urine I have found a small amount of albumen, which could be attributable to no other cause than bicycle riding. I will mention one case in particular: A young man, about twenty-five years of age, came to me eight weeks ago to be examined for insurance. He went through with a perfectly straight record as to every thing else, but upon examination of his urine I was very much surprised to find as much as one quarter per cent of albumen. I held this man up—did not immediately reject him—and have kept him under observation since then, examining his urine from time to time. The quantity of albumen has diminished, but can still be detected by careful test. He is a great bicycle rider.

In the paper and remarks thus far albuminuria has been attributed to prostatic irritation, prostatic inflammation, or a relighting of an old prostatitis following gonorrhea. In many cases the above may account for the albuminuria, but I think not in all. It would take a very considerable prostatitis to give one fourth per cent albumen in the urine; there would have to be a very decided inflammation to produce that quantity. And as in not a few cases no pus or mucus (which must be present in prostatitis or prostatitis) can be found, it is not unreasonable that the unnatural, forced use of the loin muscles in working the wheel may induce a hyperemia of the kidneys sufficient to produce albuminuria. If this be true, bicycle riding becomes a serious matter, and should be discontinued on hygienic grounds.

Dr. Irwin: In answer to Dr. Skinner as to the length of time my patients had been riding, two were beginners, and three had ridden for about a year. I do not intend to discuss the question of albuminuria in connection with the paper, but simply the question of "prostatitis" and "urethritis" as a result of riding the bicycle. I can not see the difference whether a man has or has not had gonorrhea in the extent of injury or trauma produced by the saddle of the bicycle. If a man has a damaged organ, certainly he would be more liable to suffer from pressure of the saddle than he would otherwise. Two of the cases I reported (the history of which I did not give in detail) were men who had gonorrhea fifteen years ago. One of them had had gonorrhea which lasted nine months, the other lasted seven or eight weeks; they assured me that they had no other attacks. The other two cases assured me that they had never had gonorrhea. The fifth case, a young man eighteen years of age, had gonorrhea of very recent origin, which lasted him only a very short time, and from which he was entirely cured as far as he knew. He had been riding the bicycle four weeks before he came to my notice, suffering from this form of prostatitis or prostatic urethritis, accompanied by a slight colorless discharge. So far as the shape of the saddle of the bicycle is concerned, I do not see how that concerns us now. What we want to ascertain is the effect the saddles have on these parts; the remedy will be considered later. I do not know of any thing that could be more likely to prove injurious to the prostate than the chafing and pressure from the bicycle saddle. In my experience, extending over twenty years, I have never seen a man who had had prostatitis to get entirely well; he will always have a tender prostate gland.

I think the subject is one of much importance, and I feel this more now since the discussion than when I prepared the paper presented.

J. E. HAYS, M. D.,
Secretary.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.*

The eighteenth annual session of the Mississippi Valley Medical Association convened at Cincinnati, Ohio, October 12th, and continued its session until the 14th, inclusive. A new feature was introduced in the work of the Association at this meeting, that of dividing the Association into two sections, a general Medical Session and a general Surgical Session. A large list of contributors made it necessary to introduce this innovation, and its success has suggested a further subdivision for the next

*Reported by George E. Nalsbury, Cincinnati, Ohio.
meeting. Much disappointment was felt at the inability of Dr. Hunter McNirre to attend the meeting.

No time in the history of the Association has there been better work done than at this annual session. Too much credit can not be given to the chairman of the Committee of Arrangements, Dr. George A. Fackler, for the capable and the successful arrangements of the meeting.

Upon taking the chair the president read a most carefully prepared address, in which he made two suggestions, viz., the revision of the Code of Ethics, and the publication of the papers in book form.

The recommendations of the president were referred to a special committee, consisting of a member from each State represented at the session.

Dr. C. G. Comegys, of Cincinnati, then delivered an address on Public Health, in which he mentioned having been a member of the Society when it was known as the Tri-State Medical Society. The speaker then remarked upon the fact that the medical profession was actively engaged in the prevention as well as the cure of disease, although medical men make their living by curing disease. He stated that the Asiatic cholera had not only saved him from starvation, but enabled him to procure property, as well as a horse and buggy, shortly after coming to Cincinnati. The doctor then told of being sent to the General Assembly of the State of Ohio with a petition that a man have a diploma before practicing medicine, and this was actually laughed at and ridiculed in the General Assembly. Even the newspapers were against it. It seems the public can not understand that we are engaged in the prevention of disease as well as the cure of it. Nothing has astonished Congress so much as a petition for the public health with a medical man at its head. In the House it was referred to the Judiciary Committee, and in the Senate, to the Committee on Infectious and Epidemic Diseases. These committees have never reported.

The doctor then dwelt upon the labor questions, showing that in the factories in England laboring men now begin to fail at thirty-five years of age. He also mentioned the lack of statistics concerning the physical effects of intermarriage, or marriage of first cousins, etc., and also the marriage of persons with hereditary taints of epilepsy, syphilis, etc., and strongly advised that the Government found a department for the gathering of statistics on these subjects, and that the members of the Society use their influence in this direction.

Much enthusiasm was shown, and a vote of thanks to Dr. Comegys for his address was passed.

A vote of thanks was also taken to the officers who recently protected our coast from the invasion of the Asiatic cholera.

**Surgical Section, Wednesday, October 12.**

Dr. J. E. Boylan, of Cincinnati, opened the meeting with a paper entitled Papillary Fibromata of the Larynx in Childhood, and presented a patient, a boy about nine years old, from whose vocal chords he had removed a tumor which threatened suffocation. The author specially mentioned the rarity of the disease, and referred to the success of a careful surgical operation, and the results attained in this case.

**Discussion.**

Dr. Homer M. Thomas, of Chicago, spoke of the tolerance to treatment that can be established in the larynx. Dr. Max Thorner, of Cincinnati, had seen three cases, and emphasized the unreliability of the statistics as to the rarity of the disease. In closing the discussion Dr. Boylan spoke of the diagnosis between asthma and the growths in the larynx. Dry rales and laryngitis might co-exist. We may also have very small tumors in the larynx which may be confused with asthma, or we may have very large growths which will cause very little interference with speech, and again we may have growths below the vocal chords which will produce symptoms resembling asthma.

Dr. W. H. Daly, of Pittsburgh, read a paper on the Value of Vibratory Massage in Diseases of the Throat and Nose. He said that he gave the movements of massage simply with the hand and wrist, and did not follow
the suggestions of Dr. Brunz, viz., to give the
movements or impulse from the elbow.

Dr. Max Thorner, in discussing the paper,
mentioned having been present at the demon-
strations of Dr. Brunz, and that he insisted
upon the movements of massage being given
from the elbow. Dr. Thorner had never been
able to use this movement. He had tried
massage in the treatment of ozema with good
results. The doctor wrapped the instruments
with cotton, because the copper produced pain.

Dr. Homer Thomas, of Chicago, presented
a paper on Nasal Catarrh. Diseases of the
eye are often secondary to nasal catarrh, and
are therefore controlled by the treatment of
nasal catarrh. The author spoke of the use of
the galvano-cautery in the treatment of this
disease.

The paper was discussed by Dr. Bailey, who
said that the use of the galvano-cautery should
not be condemned, but we should be very cau-
tious in its applications. Dr. Thomas thought
this point exceptionally well taken, and said
there can be no doubt as to the undue frequent
use of the galvano-cautery. The best results
are obtained by a superficial searing of the
membrane with a light quick stroke of the
electrode.

Dr. Willis F. Westmoreland, of Atlanta, Ga.,
read a paper on Tracheotomy for Foreign Bodies
in the Windpipe, with report of cases. The
author contended for immediate operation, and
although the statistics showed a frightful mor-
tality, enough to discourage the boldest sur-
gon, yet this he attributed to the use of tubes.
He thought it often better to leave the parti-
cle in the throat than to injure the parts by
the use of instruments; but if instruments are
used they should be used early. In connection
with this paper Dr. Theodore Potter, of In-
dianapolis, presented an interesting paper enti-
tled Foreign Bodies in the Bronchi, in which
he mentioned an epileptic who swallowed a
piece of pipe-stem, supposed to be two inches
in length, although the author doubted this.
There was pain in the region of the sternum,
the patient expectorated a great deal, and in
the sputum he could taste the nicotine from
the pipe-stem. He was worn and weary, the
temperature normal, pulse 80; respiration nor-
mal during rest, but excited by exertion. Per-
cussion over the right side revealed no marked
change from normal, and the left lung seemed
normal except the exaggerated breathing. In
the hospital the patient's fever reached 103°-
104° every afternoon. The fever continued,
the general condition had gone down, and he
was evidently suffering from sepsis. No op-
eration had been performed.

Discussion of both papers was then in order.
Dr. J. H. Blanks, of Meridian, Miss., empha-
sized the importance of immediate operation
for foreign bodies in the bronchi, and mentioned
four cases which he had seen, upon three of
which he operated, the other dying before
reaching his office. Dr. Hiett, of Iowa, thought
if there is any thing abominable it is the
tube, and suggested the use of a small stick
to hold open the incision in cases of
pseudo-membranous erupion, where he advised
the use of stitches. Dr. Westmoreland, in
closing the discussion, suggested tying a bow-
knot when the stitches are used, that it may
be readily unfastened if necessary.

Dr. Bransford Lewis, of St. Louis, presented
A Materialistic View of Sexual Impotence and
Allied Affections. The author stated that im-
potence is often caused by sensitiveness, mas-
turbation, excessive sexual excitement, and
gonorrhea. A contracted prepuce, or any
thing that irritates will eventually cause im-
potence. There should be a careful distinction
made between hyper excitability and lack of
excitability as causes of impotence. It is prob-
ably the failure to make this distinction which
causes such opposite views among eminent
members of the profession on this subject. In
the treatment of the disease the cause should
first be removed. The author advised irriga-
tion of the entire ureter with a half-per-cent
solution of zinc sulphate, and the injection of
silver nitrate in solutions. Systemic tonics
are frequently indicated. In extreme cases
bromide may be administered.

Dr. A. Ravogli, of Cincinnati, read a very
interesting paper on Syphilitic Plaques. Syph-
ilitic eruptions are the most reliable symptoms
of syphilis. The mucous plaque is found on
the skin and mucous membrane. It is sharply
defined, and is somewhat elevated. When
they appear on the face they dry, producing a crust; but on the palm of the hand and the sole of the foot the serum can not ooze out, and a crust does not form. The mucous plaque disappears under general treatment; it leaves no scar except pigment staining. The author defined a distinct difference between the mucous patches and the syphilitic papule, mentioning statistics showing the location of the papules and mucous plaques bearing out his assertion. It is not necessary to say that the general syphilitic treatment is the best for the mucous plaques. The first thing should be cleanliness.

In discussing the paper Dr. Ohmann-Dumesnil, of St. Louis, stated that it was an interesting fact that the author called attention to the mucous patch as a lesion not the result of the papule. The old saying that a mucous plaque is a moist flat papule is a mistake. Dr. Daly, of Pittsburg, gave an instance of four young men contracting syphilis from a young girl suffering with mucous patches in her throat. Dr. Ransohoff stated that he was not convinced of such a difference between the mucous patch and a syphilitic papule as the author suggested. Dr. Ricketts believed the mucous patch and syphilitic papule to be closely allied. Dr. Ravogli then closed the discussion, remarking that the papular eruption occurs all over the body only in the secondary stage, while the mucous patch may appear in various stages. The eruptions are differently shaped. There is no exudation in the papule, whereas there is sometimes in the mucous plaque.

On motion the session adjourned, after voting that the papers read be published with the approbation of the section.

Medical Section, Wednesday October, 12.

The Medical Section convened in Convention Hall, Grand Hotel, at 2 o'clock in the afternoon. In the absence of Dr. T. Hunt Stuckey, President of the Section, Dr. O. Evans, Franklin, Ohio, was elected president pro tem.

Dr. Philip Zener spoke of the Diagnosis of Diseases of the Spinal Cord. Diseases of the gray matter of the cord, whether anterior poliomyelitis, acute or chronic, or degeneration of the anterior cornea, is distinguished by the symptoms of paralysis, muscular atrophy, and altered electrical reactions, the only difference being the rapidity of onset and degree of development of the symptoms. Multiple neuritis presents the same symptoms, the patient is always attacked by sensory manifestations, such as pains, anesthesia, and tenderness of the muscles and nerves. The practical importance of differentiating the latter from cord diseases lies in the fact that the prognosis of neuritis is so much better than that of disease of the gray matter of the cord. Some cases of slow developing neuritis may so closely simulate progressive muscular atrophy that only long-continued observation can determine the true diagnosis. The author emphasized the importance in many cases of nervous disease of waiting a long time before making a positive diagnosis. Primary progressive amyotrophy was not here considered.

Disease of the antero-lateral columns is characterized by spastic paralysis. The presence of this array of symptoms is sufficient for the diagnosis of disease of the cord. Hysteria may simulate this condition, but the presence of ankle clonus excludes hysteria. Spastic paralysis seems essentially to belong to primary lateral sclerosis, but it may be found with cerebral lesions and secondary changes in the cord. In the cord affection incident to Pott's disease, as well as in transverse or diffuse myelitis and multiple sclerosis. In most of the diseases just mentioned a careful examination will reveal other symptoms besides those of spastic paralysis. But in cases when no other symptoms are found and the diagnosis primary lateral sclerosis seems to be established, we may, after a long lapse of time, discover that the disease is really multiple sclerosis, apparently limited to the lateral columns.

The symptoms of disease of the posterior columns are those of locomotor ataxia. The disease most likely to be mistaken for locomotor ataxia is that termed pseudo tabes, a form of multiple neuritis when sensory nerves seem to be more affected than the motor branches. The difficulty of diagnosis may be enhanced by the fact that many of the symptoms of locomotor ataxia are due to attendant neuritis.
Usually pseudo tabes may be recognized by the facts that the apparent ataxia is more frequently due to paresis than to muscular incoordination, that the bladder and genital symptoms, the girdle sensation, and especially the eye symptom, all of which are so common in locomotor ataxia, even at an early period, are almost universally absent.

The paper was discussed by Dr. Archibald Church, of Chicago, and Dr. C. H. Hughes, of St. Louis.

Dr. H. M. Lash, of Indianapolis, then read a very interesting paper on A Plea for Deeper Research into the Pathology of the So-called Functional Neurosis, which for lack of time was not discussed.


Dr. C. H. Hughes, of St. Louis, read a paper on Morbid Erotism, also Note on Nervous Disturbances after Removal, and Atrophy of Testicle, which was listened to with great interest and attention. The author cited the case of Miss Alice Mitchell, of Memphis, as an illustration of the condition. He gave quite a complete history of the affection.

Dr. Dudley S. Reynolds, of Louisville, Ky., read a paper on Asthenopia Melancholia, and Dr. W. S. Tingley, of Newport, Ky., presented a paper on Migraine.

Dr. Herman H. Hoppe, of Cincinnati, Syphilis of the Central Nervous System.

Dr. Archibald Church presented a paper on Early Diagnosis and Treatment of Acute Anterior Poliomyelitis.

General Session, Thursday, 10 a.m.

After the session was called to order the president introduced Dr. Hobart Amory Hare, of Philadelphia, who delivered the address on medicine. The author said that to deliver an address on medicine before so distinguished a body of practicing physicians as the Mississippi Valley Medical Association is a task which may well cause elation at the honor conferred, and fear lest one may be unworthy of so high a place. For a moment he regretted that he had accepted the invitation of the honorable president, for he remembered the words of our medical father Hippocrates, "Rashness is evidence of unskillfulness;" however, a second aphorism of Hippocrates urged him to his fate, "Timidity indicates incapacity." The author stated that he would not attempt a complete summary of the advances made in medicine during the past year, since such an attempt must fail for lack of time; nor would he give a long dissertation on the well-worn subject of medical education, or the history of medicine. The author then proceeded to point out several important facts which must modify our treatment of certain conditions dangerous to life. It is one of the misfortunes of the day that, whereas the progress of medicine was for many years too slow, it is now too fast to permit us to keep up with all its departments, or indeed with any one of them. The physician engaged in an active general practice finds himself relying on the methods taught him by his preceptors or gained by hasty readings of more or less standard authors.

In many instances these authors, unable to cover the entire subject treated by them from their own experience, are forced to quote from the writings of their contemporaries or predecessors, and an error made by an author one hundred years ago may in this manner be propagated by text-book after text-book. The first of these is a method of resuscitation in emergencies arising during anesthesia produced by chloroform or ether. In all standard textbooks we are told that a battery should be at hand during every operation, and in event of respiratory failure one pole should be placed over the phrenic nerve in the neck and the other in the hand or elsewhere on the patient’s body. Thus Joseph Mills, in the article on anesthetics in Treves’ Manual of Surgery, directs in chloroform accidents that “the faradic current be applied, one pole to the epigastrium and the other to the right side of the neck to try to induce the diaphragm to act.” The author had seen this method resorted to again and again by the ablest surgeons this country has produced, men whose methods in general and whose reputation would justify us in following their customs; yet a moment’s thought as to the action of the faradic current, in the rapidly interrupted form in which it is always
employed, shows us at once that to use this is to attempt to achieve something of no value. The respiratory movements of that greatest of respiratory muscles, the diaphragm, are to and fro—a muscular contraction like all other contractions. Every one knows that a muscle firmly contracted in a tetanic, rigid spasm by the application of a rapidly interrupted current is as useless as is that same muscle when relaxed by the overaction of a drug. What we desire under such circumstances is a slow contraction and relaxation of the diaphragm, such as we see in health, and the nearest approach to this is, theoretically, to be obtained by the current which is slowly interrupted. Practically, however, we find that both of these currents are worthless, and worse than worthless, are dangerous. In the first place, it is impossible to influence the phrenic nerves by any but strong currents, for the resistance offered by the cervical tissues is too great for feeble currents to penetrate them. In the second place it is easier to stimulate the pneumogastric nerves by such a procedure than to influence the phrenic nerve as directed by most authors, which only results in the contraction of one half of the diaphragm. In conjunction with Dr. Martin the author has proved that these opinions are no idle theories, as the tracing presented indicated. Here notice, it was indicated that though the phrenic nerves were unaffected the pneumogastrics were sufficiently stimulated to inhibit the action of the heart, and if this inhibition had been added to the depression due to the prolonged use of an anesthetic, or to engorgement of the ventricles, it could readily be seen that death might have resulted at once. It has been said by many that they have used this method with great success. The answer to this is, that the results obtained, while desirable, were reached inadvertently, not directly. That is to say, the application of a peripheral irritant to the skin caused a reflex perspiratory gasp, similar to that seen when a cold wet towel is applied to the abdomen. Equally good results would be obtained if the other electrodes were swept over the abdomen and chest, and not pressed against the region of the phrenic and pneumogastric nerves. The next point mentioned was the limitation of the treatment of anesthetic narcosis, in so far as posture is concerned. It has become a favorite custom with many to invert, partly or completely, any patient whose respiration or circulation fails during anesthesia. It goes without saying that this is only justifiable when heart failure is shown by marked facial pallor. If the respiration is at fault, we should carefully avoid any inversion, because the presence of still more venous blood about the already exhausted respiratory center can not aid it, but only injure it. Further than this, by inversion we may distinctly interfere with the respiratory act by compression of the diaphragm through displacement of the abdominal viscera. This fact is particularly true in persons with large pendulous abdomens, or in persons who have recently suffered or are suffering from tumors of the abdomen. By means of these growths the anterior posterior and the lateral diameters of the chest in the neighborhood of the floating ribs is greatly increased, and the diaphragm is stretched and becomes more sail-like. The author had death follow the removal of a large ovarian tumor forty-eight hours after the operation, because the diaphragm, having no points of resistance upon which to contract by reason of a collapse of the lower part of the chest, simply rose and fell like a sail of a vessel coming about—a useless organ encroaching on the chest cavity during inspiration and descending in such a way on expiration that little air passed out of the trachea. If one place a rabbit under ether or chloroform when tied flat on its back, so that its ponderous abdomen encroaches on its comparatively small chest, respiratory death quickly ensues, whereas in an erect position this does not occur.

Another point of great importance in connection with the use of anesthetics is the motion of the diaphragm and its functional activity. The author has been able to forsee danger by watching this muscle, when the examination of an ordinary respiratory act, as of old, would fail to show any abnormal changes. So much discussion has recently been before the profession as to the functions which first give danger signals that this point becomes the more interesting and valuable. It is an unre-
liable rule, under the influence of ether at least, that the first evidence of the excessive effect of ether is seen in the diaphragm. As soon as the movements of this muscle become abortive or irregular it is time to stop the anesthetic. Of course this only applies to the case which has passed the early stages of struggling, when the struggle may readily interfere with the regular action along the muscles of the respiration. The movement of the diaphragm which forebodes ill is an irregular, flapping movement, the reverse of the normal, for in the normal the belly-wall protrudes in inspiration and recedes in respiration.

Another point of great importance, not only in the treatment of persons suffering from the over-effect of anesthetics, but in the case of other accidents, in the case of heat, was first impressed on the author most forcibly by some studies made on the dog and on man in 1888, and later by further observation on man. He found it possible to lower the bodily temperature of a dog many degrees by prolonged anesthesia, and in man a fall amounting to 4° might occur in comparatively brief operations, even when little or no blood was lost. The author had hardly made these observations before a striking example of care in scientific study, exceeding care in ordinary surgery, was presented. Visiting Victor Horsley's laboratory in the Brown Institution, he saw a monkey upon whom a brain experiment was being performed lying unconscious in a water bath, and well covered to retain his heat. This, he was told, was practically a necessity for the survival of the monkey and the success of the work. The next day, however, in operating on the human brain no such precaution was taken. The application of heat to the body of a person undergoing an operation is of the greatest importance, and its use after the operation stultifies the operator, who forgets the old adage, "An ounce of preventative is worth a pound of cure." Care should be taken that the heat is not too great and that artificial heart-stroke is not brought about. The same facts hold good in regard to cases of hemorrhage or shock. In many cases of hemorrhage heat has been the only remedy not employed. As food is used for the production of bodily heat, we are practically providing the patient with food without giving his organism the labor of metabolism. That death is due to cold in many cases is shown by the experiments of Brunton, who has found that animals poisoned by chloral die from a dose which, when artificial heat is given them, fails to produce dangerous symptoms. The author then mentioned strychnia as a remedy for and preventive of surgical shock and anesthetical collapse, not to speak of its value in opium poisoning. In these conditions atropine, while very useful so far as its vasomotor effects are concerned, does not compare with strychnia, either theoretically or practically. To those who habitually employ atropine and morphine injections prior to the use of the anesthetic, the use of strychnine, or strychnine and atropine combined, may be recommended. There is one point to be remembered in regard to the use of strychnine, and that is to give it in full doses or leave it alone. Not less than a twentieth of a grain should be employed hypodermically every half hour in an adult, and if the condition of shock and respiratory and cardiac failure be marked, one dose of as much as 1.5 per cent may be given in this way. Disagreeable effects rarely if ever follow, and, if they do, will amount to little more than muscular twitching, which can readily be governed by sedatives, for if the drug can stimulate the nervous system sufficiently to cause irritability, it will have pulled the patient out of the "slough of despond," and he will be able to stand further treatment should the effect of the strychnia be excessive. Under the conditions spoken of, the man is on the brink of death, and we can not afford to make haste slowly in dragging him back. A few moments lost and he may be beyond reach and so far over the edge that human aid can not draw him back to life.

Another point is the position of the head, neck, and tongue in cases where artificial respiration is being performed. The position of the epiglottis was represented in its relation to the glottis in various positions of the head and neck. From these diagrams, the proper way to open the respiratory tract does not consist in drawing the tongue forward at the same time that the jaw is pushed forward as far as
its articulation will allow. Drawing the tongue forward over the teeth does not completely open the glottis. It is necessary that at the same time the jaw be shot forward as far as possible, and that the tongue shall be lifted from the floor of the mouth while it is being drawn forward. It being pulled rather in the direction of the upper than of the lower jaw. The proper position of the head when the body is lying flat on its back is not in full retraction nor in flexion upon the chest, but in extension in a direct line with the body; the entire head, not the chin alone, being then pulled forward. The position of the neck is illustrated by the long distance runner, who cranes his head and neck forward and upward in order to straighten his air passages, or in the horse which cuts its wind, and to which the Kimball-Jackson is applied to straighten his air tubes.

The author then named the bromide of ethyl as an anesthetic safer than chloroform, and almost if not quite as safe as ether. Much of the evil influences attributed to it in the past have been due to the use of bromide of ethylone, which many think is the same product, but which is an exceedingly fatal drug, and to the fact that the bromide of ethyl has been wrongly employed. Much of the bromide of ethyl is impure or decomposed. It should be kept in black bottles, tightly sealed, and protected from light and air in every way. The profession are gradually coming to recognize the fact that anesthetics are to be used like the other drugs, because of distinct indications. In much the same way that the physician decides that digitalis is suited to one case of cardiac disease and strychnine to another, so should he recognize that one case is suitable for ether, one for chloroform, and one for bromide of ethyl. Experiments recently made by Thornton and Meixell in the Pharmacological Laboratory of the Jefferson Medical College indicate that pure bromide of ethyl has, even in overwhelming doses, little depressant effect upon the heart, and that its dominant effect is on the respiration, which often ceases in a dog two minutes before the heart ceases to beat, the death being due to asphyxia. Indeed these investigators found it absolutely impossible to produce cardiac death by the use of ethyl bromide by inoculation. The great dominant fact in regard to the bromide of ethyl is that it is only to be used for brief operations, not for long ones. In relieving the severity of the pains of labor, Prof. Montgomery, of the Jefferson College, has used it most extensively with the best of results, and has also employed the drug in minor operations. The volatility of the drug renders its action both rapid and fleeting, but the great advantage in labor is that it can be inhaled by the patient herself, and as soon as she gets enough to relieve her pain the hand holding the cone drops from her face. The action is so fleeting that the patient, relieved of the acme of her pain, is in a moment out from the anesthetic and ready to obey the commands of the physician, for the drug does not produce the drunkenness of ether or chloroform. When bromide of ethyl is used it should not be dallied with. From thirty drops to two drams are to be put upon the inhaler and pushed. If it is given slowly it fails to anesthetise pleasantly, and produces cyanosis, or more frequently tetanic muscular contractions in different parts of the body, which are, however, not at all dangerous. In the Harveian oration, delivered by Andrews before the Royal College of Physicians, of London, in 1890, he called attention to the fact that while the general systemic circulation is enlaced with vaso-motor nerves to a great extent, the pulmonary circulation in the lower animals does not always act in accord with the general circulation. By a process of reasoning, which from the limited facts in his paper are not well based, but which in fact are well founded, he reaches the conclusion that ergot is not a good drug to administer in cases of hemorrhage from the lungs, because it causes primarily an increase in the blood supply to these parts by dilating the pulmonary blood-vessels. The physician at no time stands as helpless as in the presence of this dangerous and pitiful condition. Many methods of treatment advised are either startlingly radical or absolutely infeasible. The use of sprays is usually prevented by moral squalor, which has come over the patient through fever, cough, and the spitting of blood. By far the most common recommendation in the text-books is to give a hypodermic
injection of morphine to allay the nervousness of the patient. This recommendation is not correct. While it may allay nervousness, it will likewise cause an increased flow of blood, and increased loss of this fluid. Aside from a mass of experiments on the lower animals, clinical experience shows most conclusively that morphine is a powerful stimulant of the heart and vaso-motor nerves, and we recognize this power in the therapeutics by giving morphine in the dyspepsia and circulatory failure of advanced cardiac disease, where digitalis and other cardiac stimulants fail. If nervous sedatives are needed, we have in chloral a drug whose power over the nervous system is very marked, and at the same time depresses the heart, which, through excitement, is already too active. The bromides can also be employed for this purpose, but the best drug is aconite, which is indicated by every symptom present, and it may be much aided in its action by a good cannabis indica. It not only quiets the already excited heart, but still further depresses it and quiets nervous irritability of the general system. It decreases the amount of blood sent to the lungs, and so lessens the hemorrhage, and it is only contra-indicated at one period of the attack, viz., when a hemorrhage has produced fainting from exsanguination. Under these circumstances it is not necessary to state that still further depression is to be avoided. On the other hand stimulants are not indicated. We must try to induce the blood to flow at a low pressure in the lungs. This is best accomplished by elevating the patient’s limbs or trunk, and if need be by the application of Esmarch or other bandages to the limbs to exclude the blood from these parts. Here again the importance of external heat, already referred to, must not be overlooked.

The narrow escape which we have had from an epidemic of cholera in this country induced the author to mention several methods used during the last few years for the treatment of this disease and its relatives with so much success that they have been and should be employed in non-infectious choleraic disorders, which every practitioner is called upon to treat. This is the more rational, since we have now found that all these disturbances of the alimentary canal are due in great part to micro-organisms which manufacture poisons in the bowel and prevent its function. The discovery of this effect has led to the founding of our therapy on a firm basis, for many of these germs find a distinctly acid reaction of their surroundings so inhibitory to their existence as to prevent their growth. Thus we have used sulphuric acid for years only for its astringent power, without knowing that it was of value because of its acid reaction; and in France lactic acid is a very favorite remedy in the serous forms of diarrhea. As an interesting point in the evolution of medicine we find the field of usefulness of opium constantly growing smaller, and in no direction has it become more circumscribed than in the treatment of diarrheal disturbances.

Nicholson, of Patna, India, has obtained splendid results with salol in fifteen-grain doses every three or four hours for a day or two. In 18 cases recovery took place, although 11 were in collapse when the salol was administered. Hehir treated 88 cases with corrosive sublimate with a mortality of 44.7 per cent, and 11 cases with salol with no deaths. Chalk and salol relieve ordinary diarrhea. In some cases Cattani employed a mixture of

| Chamomile       | 2,000 parts; |
| Tannic acid    | 10 parts;   |
| Gum arabic     | 30 parts;   |
| Tinc. of opium | 2 parts.    |

As the president remarked, it was rather difficult to get down to the business of the General Session after having been entertained in such a scholarly and skillful manner by the distinguished gentleman.

The miscellaneous business was then taken up: and the Committee on Revision of the Constitution and By-laws recommended that Article III of the Constitution be struck out, and the following adopted: “Any medical man in good standing shall be eligible for membership in this body who resides in a State whose waters are tributary in whole or in part to the Mississippi River.” Afterward, by motion of Dr. H. N. Moyer, this was changed to include medical men from all parts of the world by striking out the latter part; and this was laid
on the Secretary's table until the next morning, when it was adopted. The dues were placed at $3.

Dr. Hare then requested that gentlemen who had cases of death from anesthesia, in which either the heart stopped before the respiration, or where the respiration ceased before the action of the heart failed, to communicate the facts of the cases to him, since he is gathering statistics as to the cause of death from chloroform, and the Nysam of Hyderabad requested him, last spring, to undertake another research at his expense to determine this point.

[To be continued.]

Reviews and Bibliography.


From the names of the authors of this book we recognize its value, all being representative teachers of surgery in leading medical schools and hospitals. Of the thirteen authors, Drs. Charles H. Burnett, Wm. W. Kean, William Thompson, and J. William White are from Philadelphia; Frederic S. Dennis, Lewis S. Pilcher, and Lewis A. Stimson, from New York City; Roswell Park, from Buffalo, N. Y.; J. Collins Warren, from Boston; Francis J. Shepherd, from Montreal; Phineas S. Conner, from Cincinnati; Charles B. Nancrede, from Ann Arbor, and Nicholas Senn, from Chicago. Being all from the North and East the differences of opinion of the respective authors are of minor importance. As the proof-sheets of the entire book were submitted to all of them for mutual criticism and revision, this work, therefore, may be said to express the consensus of opinion of them all. It is no longer possible for one man to write a text-book of surgery; especially is this true when surgical bacteriology and the methods of treatment in relation to asepsis and antisepsis are making such rapid progress.

Book I, on General Surgery, contains chapters most excellently written and beautifully illustrated on Surgical Bacteriology and Inflammation. The chapter in Book I on the Process of Repair shows us the wonderful advances made through asepsis. Book IV, on Operative Surgery, is especially full, and the illustrated photographs are highly practical. The typography, including illustrations, of the whole work is most excellent. Colored lithographs, half-tones, colored plates, and wood-engravings being as handsome as are ever seen in a textbook. Such a work should receive the hearty support of all in the profession who desire to be up to date. J. L. H.

The Medical News Visiting List for 1893. Weekly (dated, for 30 patients); Monthly (undated, for 120 patients per month); Perpetual (undated, for 30 patients weekly per year); and Perpetual (undated, for 60 patients weekly per year). The first three styles contain 32 pages of data and 176 pages of blanks. The 60-Patient Perpetual consists of 256 pages of blanks. Each style in one wallet-shaped book, pocket, pencil, rubber, and catheter-scale, etc. Seal Grain Leather, $1.25. Philadelphia: Lea Brothers & Co. 1892. The Medical News Visiting List for 1893 has been thoroughly revised and brought up to date in every respect. The text portion (32 pages) contains the most useful data for the physician and surgeon, including an alphabetical Table of Diseases, with the most approved Remedies, and a Table of Doses. It also contains sections on Examination of Urine, Artificial Respiration, Incompatibles, Poisons and Antidotes, Diagnostic Table of Eruptive Fevers, and the Ligature of Arteries. The classified blanks (176 pages) are arranged to hold records of all kinds of professional work, with memoranda and accounts. Four styles are now published: Weekly (dated, for 30 patients); Monthly (undated, for 120 patients per month, and good for any year); Perpetual (undated, for 30 patients weekly per year); and Perpetual (undated, for 60 patients weekly per year).
per year). This last style consists of 256 pages of assorted record blanks, without text. The Medical News Visiting List adapts itself to any system of keeping professional accounts. Each style is in one volume, bound in handsome red leather, with pocket, pencil, rubber, and catheter scale, price $1.25. When desired, a Ready Reference Thumb-letter Index is furnished, which is peculiar to this Visiting List, and will save many-fold its small cost (25 cents) in the economy of time effected during a year. In short, every need of the physician seems to have been anticipated in The Medical News Visiting List.


The "All Around the Year" calendar which Mrs. Sunter sends out this year is as charming a piece of work as any thing she has done. Like its predecessors, it is printed on heavy cardboard, gilt edged, with chain, tassels, and ring, and is of convenient size. The designs are fresh and delightful, quaint and picturesque little lads and lassies issuing in each month with just the right words, and in the most charming attitudes, while the lines on the cards combine to form a very pleasing love story. Done in several colors, one can scarcely imagine anything more graceful than the twelve cards, each bearing the dainty design which includes the month's calendar as a part of the picture. The cover shows a pretty little Miss watching a Cupid "warming his pretty little toes" at an open fireplace, while on the last page this same Cupid (or his fellow) is playing sweetly, "Good-by, my Lover, Good-by."


This work is largely a compilation of the best methods of examination known to microscopic science. It contains some original observations and plates, but the works of many standard authorities have been largely drawn upon. It is sufficiently complete, and the directions laid down concise enough to enable the beginner or practitioner to submit his specimens to microscopic examination without much difficulty. As an aid to microscopical diagnosis the work can be recommended to the practitioner not already supplied with more comprehensive works.

H. M. G.


This little book furnishes us with an hour or so of very pleasant as well as profitable reading. The author states that the "book was written primarily to put forward two ideas: First, that there is associated with temperament a specific rate of change; secondly, that failure to keep up that rate, or, in other words, a failure to have elimination keep pace with accession of material is the primal cause of organic disease."

Abstracts and Selections.

Mind Blindness.—In the last number of the Neurologisches Centralblatt appears an abstract of a paper by Dr. Wilbrand, in the Deutsche Zeitschrift für Nervenheilkunde. In this paper is given the sequel to a case of mind blindness with hemianopia, published by the author in 1887. The completeness with which the case was recorded in the first instance and the accuracy with which it was observed give the highest value to the account which is now presented of the condition of the brain. The patient was a woman, aged sixty-three, who until the onset of her illness had been healthy and intelligent. She suddenly became unconscious, and for some weeks she remained so. When she regained consciousness she mistook animals for human beings, and her ideas as to her position in time and place were rather hazy. Even in well-known places, such as her own house and amidst her own furniture, she could not find her way about; but if she closed her eyes her power of regulating her movements was much greater. She was confused and excitable; she said that she thought "upside down," that she lead "a mechanical life," and that her sense of smell was much finer than usual. She also suffered from feelings of "explosions," which
took place in her head without any noise, but accompanied by a sudden perception of light. There was no paralysis of ocular muscles and no change in the fundi; there was incomplete left homonymous hemianopia and a partial hemianopic defect in the lower half of both right fields. Inside the defective left half fields there was a zone in which only light—not form or color—was recognized. She read writing and printing fluently with the aid of convex glasses. She could write to dictation correctly, but in spontaneous writing she made frequent mistakes, omitting words or repeating them needlessly. Her symptoms varied but little during ten years, and she finally succumbed to an apoplectic attack within a few hours of its onset. At the necropsy the fusiform lobe on the right side was found to be depressed, and it had apparently been transformed into a loose walled cavity which extended to the extremity of the occipital lobe. The occipital convolutions were reduced in size; the whole lobe was somewhat depressed but not softened. The hinder part of the cuneus was softened, its extremity being connected with the softened area of the fusiform lobe. The cortex of the calcaneal fissure was a little altered; the precuneus was normal and so were the lateral aspects of the occipital lobe and of the whole parietal region. On the left side there was a small cavity under the gray matter of the second occipital convolution, with a softened area in front of it, evidently an old lesion, and anteriorly this was continuous with a recent softening which had completely destroyed all the central matter of the hemisphere. It will thus be seen that the center for the reception of visual impressions in the left hemisphere was intact, but the interruption of the subcortical associative fibers had resulted in permanent mind blindness. On the other hand, by the destruction of the cuneus and the affection of the calcaneal fissure on the right side, the function of the center for the reception of visual impressions on that side was abolished, and as with closed eyes the recollection was scarcely impaired the symptoms of mind blindness must be wholly ascribed to the lesion in the second left occipital convolution. The total blindness which was present at the commencement of the illness is to be ascribed to the permanent destruction of the area for visual perception on the right side and to a temporary abolition of the function of that on the left side through pressure on the fibers, which had not caused complete destruction. Dr. Wilbrand had previously suggested that mind blindness was the result of a cortical lesion in an area in the left hemisphere, subserving visual recollection, and he confirms this by the anatomical condition which he has now described—viz., the destruction of certain associative fibers of the occipital lobe. On reviewing all the circumstances of the case under consideration, he is of opinion that the following propositions may now be laid down: (1) That mind blindness may arise through destruction of certain connecting fibers—for example, by lesions which lie close under the surface of the first and second occipital convolutions; (2) that symptoms of permanent mind blindness, with complete homonymous hemianopia or with hemiachromatopsia alone, are due to lesions in each occipital lobe affecting either the cortex or underlying fibers; (3) that the area for visual impressions and the area for visual recollections of one and the same hemisphere are in direct connection; and (4) that if, when the visual area in each hemisphere is affected, the area for visual recollection in one hemisphere is unaffected, the disturbances of optical perceptions vanish when the eyes are closed. The case, it will be seen, is an extremely important one, and it will no doubt be the means of throwing light on many hitherto obscure problems.—London Lancet.

Action of Alkaloidal Poisons on Leucocytes.—Dr. E. Maurel, of Toulouse, has performed an important series of experimental researches on the action of poisons on leucocytes. The results are published in recent numbers of the Bulletin de Thérapeutique, and an abstract will be found in the Boston Medical and Surgical Journal of August 11th of this year. With regard to strychnine, he finds that the toxic action of the alkaloid on the animal economy is in the ratio of its destructive action on the leucocytes. "In poisoning by sulphate of strychnine, the death of the leucocytes and that of the animal are simultaneous." The quantity of strychnine necessary to kill immediately all the leucocytes in 100 grams of human blood has been found to be 5 centigrams; this amount of blood may be said to represent 1 kilogram of the weight of the body. A much smaller quantity of strychnine—2 centigrams—is equally fatal to the leucocytes in 100 grams of blood, though several hours are required for their complete destruction. The immediate effect of the poison on the white corpuscles is to arrest their spontaneous activity and fix the elements in the spherical state. In investigating the action of atropine on the white corpuscles Dr. Maurel found here, too, a complete concordance between the quantity of toxic material necessary to kill the animal and that necessary to kill the corpuscles. Struck by this concordance, which suggests a special role of the leucocytes
in death by this toxic agent, Dr. Maurel experimented with the hare—an animal which eats belladonna with impunity—to ascertain if the leucocytes of the hare's blood are affected by atropine. He found that this alkaloid was almost without effect on the leucocytes of the hare. His conclusions are formulated as follows: In the dose of 5 centigrams or more sulphate of atropine instantly kills the leucocytes contained in 100 grams of human blood. In the dose of 2 centigrams these elements can live but a few hours, and from the moment of contact they present sensible modifications in their activity and in their form. In the hare, on the contrary, the leucocytes can live in a solution of 2 grams of atropine to 100 grams of blood, and perhaps in a stronger solution. Lastly, considering the concordance between the quantity of sulphate of atropine necessary to kill a man and that which suffices to kill the leucocytes of human blood, or impress upon them important modifications, considering moreover, that the immunity of the hare is closely associated with the immunity of its leucocytes, Dr. Maurel is led to the conclusion that it is probable that the leucocytes have a principal part to perform in poisoning by that alkaloid. Similar investigations relative to pilocarpine have shown that it takes 10 centigrams of that substance to instantly kill all the leucocytes in 100 grams of human blood; 5 centigrams will kill them in a few hours. In another series of experiments Dr. Maurel investigated the action of cocaine on the white globules, and he concludes that death by cocaine is the consequence of the death of the leucocytes or of modifications which the latter sustain under the influence of this agent. The quantity of cocaine which is immediately fatal to the leucocytes is 1 per cent of the quantity of the blood or about 1 gram per kilogram of the weight. Thirty times as much cocaine is required to kill an animal when this salt is taken by the mouth as when it is injected into a vein. In death by intravenous injections of toxic solutions the death may be caused by the leucocytes suddenly killing being swept along the blood stream and acting as emboli. These elements, in fact, after their death, take the form of rigid discs, the long diameter of which exceeds by one third at least the caliber of certain capillaries.—Ibid.

A Case of Charbon.—An inquest was held at St. Pancras Coroner's Court on Saturday last on the body of an engine-driver employed by some horse slaughterers near King's Cross, who died in the Royal Free Hospital on the previous Wednesday. The source of the disease can not be traced, for although the man worked at the horse slaughterers', and they deal with all kinds of diseased animals, they are sent from various parts of England, and the deceased did not in the course of his employment have to touch any of the animals, having to attend solely to the engine. No other instance of the disease is known to have occurred among the other men employed at the establishment for the last year. The history of the case was that on September 4th a small boil formed on the right cheek, which the patient scratched; the next day the boil was somewhat larger, and on the 6th there was a superficial sore, with swelling at the neck, and he felt ill. On the 7th he was admitted to the hospital, under the care of Mr. Battle, with a superficial sore about the size of a florin, surrounded by a ring of minute vesicles. The cheek and right side of the neck were occupied by a large puffy swelling extending from the sore. The temperature was raised (101°), pulse quick, and the man looked ill, and had dyspnea with noisy laryngeal respiration. Coma rapidly supervened, with loud, brassy stertor. Anthrax bacilli were found in the serum taken from the vesicles, and the sore was excised, but without benefit. Petechiae were present along the inner side of the arms, and the glands on the right side of the neck were enlarged and tender. He died at one o'clock next morning. At the post-mortem examination made by Mr. Farmer the usual appearances noted in patients who have died from anthrax were found; but in addition it was observed that extensive general hemorrhage had taken place in the meninges of the brain, and over the left occipital lobe was a clot, about the size of a walnut, compressing the convolutions. There was a small amount of clotted blood also in the lateral ventricles and in the fourth ventricle. The sore presented no central dark slough, and there was no surrounding redness. In these points and in its rapid course the case re-embled the condition described as "malignant edema," a variety not common in this country.—Ibid.

A Case of Tetanus with Double Facial Paralysis; Recovery.—J. K., aged fourteen years, farm servant, fell and cut his head on January 4th. The mother covered the wound with stamp plaster, which was allowed to remain adhering for a week. Pus was then observed coming from under the paper, so a poultice was applied and the dressing removed. A day or two after this he complained of stiffness in the jaws and neck, and this increased until the fifteenth day after the injury, when his jaws became firmly locked and he could scarcely swallow. I saw him for the first time
on the sixteenth day after the injury. The wound, which had evidently been a badly con-
tused one, was nearly healed, and rather more
than an inch in length. It was situated on the
forehead, running obliquely upward and to the
left, from a little above the root of the nose.
He was sitting in a chair, and would not lie in
a bed, since he found the latter position more
irksome and caused worse exacerbations. He
could not endure darkness or noise, and re-
quired a light all night. His jaws were close
together and rigid; masseter, temporal and
sterno-mastoid muscles firmly contracted; in-
tellect clear; face expressionless. When asked
to smile he said he could not, nor could he
properly close his eyes. There was complete
paralysis of muscles of both sides of the face.
The pupils reacted to light, and accommodation
and movements of the eyes were normal.
He suffered from frequent cramps in the legs and
abdomen. His arms moved awkwardly, and the
grip of the hands was feeble. Dysphagia
was a prominent symptom. There was a pro-
fuse flow of saliva, which ran out of his mouth;
he suffered much from sleeplessness, for many
days and nights only obtaining a few minutes'
sleep at a time. He was given a mixture of
chloral hydrate with bromide of potassium and
tincture of hyoscyamus every three hours, and
at night he had opium in addition. In a week's
time the paralysis on the left side of the face
began to subside, and in another week the right
side did likewise, and he was then soon able to
whistle, smile, etc. At first he could not walk,
but after a fortnight he could do so with assis-
tance; and his action was peculiar, each leg
being moved forward from the hip as if rigid
through its length, the foot dragging along the
ground. The symptoms gradually subsided,
and in six weeks he was practically well and
able to go away for a change. A short time
ago I saw him, and he was in perfect health.

This case reminds one of the form described
by Rose of Zürich, and called by him "cephal-
tic tetanus;" but, so far as I am aware, only
one side of the face was paralyzed in the cases
mentioned. From the dysphagia and irritation
caused by noise and movement the term "hy-
drophobic tetanus," already used to some cases
of this disease, would here be an apt one. — Mr.
W. Huntington, Ibid.

CEREBELLAR CYSTS.—In the International
Journal of the Medical Sciences for August of
this year is an important paper by Dr. R. T.
Williamson on this subject, with special refer-
cence to the occurrence of simple serous cysts
in the cerebellum. He gives the details of
two cases presenting the ordinary clinical fea-
tures of cerebellar tumor, in each of which the
carcopsy revealed the existence of cysts in the
cerebellum, which appeared at first to be sim-
ple, and only on very careful examination of
numerous parts of the cyst wall were they
found to be really the result of new growth—in
the one case gliomatus and in the other
sarcomatous. Dr. Williamson, while not deny-
ing the possibility of so-called simple or serous
cysts originating in other ways, is inclined to
think it more probable that these cysts have
been tumors in which the cystic degeneration
has been so marked and so extreme that the
whole of the tumor growth has disappeared,
or only so minute a portion has remained that
it has escaped detection. His reasons for this
view are briefly as follows: That the clinical
history in such cases is the usual one of tumor,
and that the liability of intracranial tumors to
undergo cystic degeneration, as is well known,
is very great. In some cases also what have
been regarded as simple cysts have been shown
on very searching examination to contain in
the wall a small mass of new growth, and this
mass in one case was so small as to measure no
more than \( \frac{3}{4} \) in. by \( \frac{1}{2} \) in., a considerable por-
tion of which consisted of blood-vessels. Fur-
ther, Dr. Williamson urges that, if the cystic
degeneration can be so marked that only a
patch of new growth of these minute dimen-
sions may remain, it seems not improbable that
in some cases the whole of the tumor may dis-
appear and only a cyst remain; or the portion
left may be so small as to escape detection.
The occurrence of such cysts in the cerebellum
suggests the possibility of treating some of the
supposed cases of cerebellar tumor by aspira-
tion and drainage. Operations for the removal
of cerebellar tumor are notoriously unsuccess-
ful on account of the difficulty of the localiza-
tion and of the operation; and if there is any
reasonable hope that a cyst is present, naturally
the treatment suggested would be adopted.
Nor is there any reason why such treatment
should not be extended to the cerebrum, as
was actually done in a case which Dr. Will-
iamson quotes as recorded by Oppenheim and
Köhler. This was a case of Jacksonian epilepsy
in which at the operation a cystic glioma was
found in the right motor area. The superfi-
cial part of the growth was removed and the cavity
drained, with the result that the left arm,
which had been paralyzed, regained power,
and the patient otherwise improved so much
that he was discharged in good health three
months after the operation.—Ibid.

CURIOSITIES OF TINNED FRUITS.—A corre-
spondent has submitted to us for examination
a living creature which he states was obtained
from the inside of a tinned pineapple. The
fruit had been boiled at Singapore previously to tinning it, and was then imported to this country. On the tin being opened our correspondent was somewhat surprised to find a living insect, of strange and unknown appearance, inhabiting the inside of the pineapple. On examining the insect we found it to be the larva of some beetle, the species of which could not be accurately ascertained; consequently it was impossible to say with certainty whether its natural food was vegetable or animal material. It is quite possible, however, that the statement of our correspondent regarding the cooking of the pineapple may be correct; for the fruit might have been imperfectly or incompletely cooked. In that case the temperature of the interior might never have reached so high a degree as to cause coagulation of the living tissues or of the structure of the egg or larva. The power of many insects and mites to resist both high temperatures and the action of many poisons is well known and exceedingly remarkable. Thus the seed of the nux vomica, deadly to most animals, forms the appropriate food of certain beetles. Goats, again, are well known to have no special aversion to hyoscyamus as an article of diet. There is of course always the possibility of error of observation and of the introduction of the insect after the fruit has undergone the process of preservation.—Ibid.

The Pathology of Dropsy.—On September 5th I was called to see L. M. X., a little boy aged six, who was suffering from well-marked scarlet fever; throat, tongue and rash were all typical; the temperature was 102°. The case ran an ordinary course, and by September 9th the temperature was normal and the rash had almost disappeared. I had tested the urine daily as a matter of routine, but had found nothing abnormal. On September 10th when I called I found considerable swelling of the whole face, especially marked on the upper lip, and the complexion pale and rather waxy-looking; there was also swelling of the left leg and slightly of the scrotum; the temperature had run up to 100.4°. I expected to find the urine highly albuminous, but was surprised to see, on testing the boiling, that there was no precipitate, nor was there any reaction with either nitric or picric acid. The amount of urine passed was unfortunately not measured, but the patient's mother stated that he had not passed nearly as much as usual. I ordered a mixture containing digitalis, and on the next day (September 11th) the swelling had nearly disappeared, while to-day (September 12th) there is none discoverable and the waxy complexion has given way to a more healthy color. I have examined the urine at different times, before and after meals, but have quite failed to find any albumen. I offer no explanation of these facts, but content myself with recording them.—W. A. Murray, B. A., M. B., Ibid.

The Importance of Obstruction to the Outflow of Urine as a Cause of Puerperal Eclampsia.—The following brief note concerning a necropsy which I performed a short time ago may be of value to those who, like myself, were interested in Mr. Gifford Nash's paper, published in The Lancet of August 27th, on the above subject. The girl had died of double pleurisy with a little pneumonia, which had commenced suddenly with a rigor six days before her death. She was pregnant for the first time with a six months' fetus. Both ureters from the kidneys to the brim of the pelvis were dilated up to the size of the common iliac artery, while the kidneys were in a condition of slight hydrenephrosis, with much congestion of their substance. No obstruction could be found within the canal of the ureters to account for this distention, and the whole condition strongly suggested that the ureters had been obstructed from without by the pressure of the pregnant uterus. The urine during her stay of four days in the hospital was highly albuminous and contained also a trace of deutero-albumose.—G. E. Hale, Ibid.

Convulsion Treated by Compression of the Carotid.—Mrs. H., a married woman, aged sixty-four, had been under my care for over two years, suffering from chronic rheumatism, renal troubles, etc. I had not seen her for some months previously. I rode off immediately, and on my arrival found the patient in a fit, which I was told had lasted one hour and a half. The pulse was full, respiration noisy and labored, and the muscles of her face and body were convulsed. I determined to try Dr. Roheim's treatment. Except for the force with which the carotid was being pressed, I found this comparatively easy to do, the woman being very thin. Within a few moments from placing my thumb on the artery the convulsions of the face and body began to cease, the respiration gradually became slower and deeper, and in about two minutes and a half she came out of the fit, looked around in a dazed way, and, when I asked her if she was better, nodded her head in reply. Since then she has had no return of the attack.—Dr. T. G. Kelly, Ibid.
SOUTHERN MEDICAL COLLEGE ASSOCIATION.

On the 16th instant delegates from fifteen southern medical schools convened in Louisville to consider the question of raising the standard of medical education and extending the time of the college course.

Prof. J. M. Bodine, Dean of the Medical Department of the University of Louisville, and well known as the leader of the reform medical education movement of some eighteen or twenty years ago, was called to the chair.

The plan of forming a college association was heartily indorsed, as presented by Drs. W. T. Briggs and C. C. Savage, the committee appointed at the conference held in Nashville last July.

A committee was appointed, composed of Dr. W. T. Briggs, Dr. J. V. Marvin, and Dr. J. S. Cain, to which was referred the following points:

1. Shall we effect an organization of Southern medical colleges?
2. Shall we extend the time of attendance on lectures to three courses?
3. What shall be the preliminary requirements of students, and how shall they be ascertained?

The committee reported favorably on the three questions submitted, and the report was unanimously adopted. The report embodies the extension of the lecture term from two sessions to three sessions of six months each, to be attended on three different years, and provides that no student may matriculate who has not a diploma from a literary school, a certificate from a high school, or a second-class teacher’s certificate from his County Superintendent of Education.

Permanent officers were elected as follows: Dr. J. M. Bodine, of Louisville, President; Dr. W. D. Haggard, of Nashville, Vice-President; Dr. G. C. Savage, of Nashville, Secretary and Treasurer. Unless otherwise ordered by the President, the annual meetings of the convention will be held at such times and places as mark the meetings of the Southern Surgical and Gynecological Association.

The new regulations with regard to colleges will go into effect with the sessions of 1893-94.

SOUTHERN SURGICAL AND GYNECOLOGICAL SOCIETY.

Since our last issue this Society of representative surgeons has come, functionated, and departed. The verdict is that the Society never held a more interesting series of sessions, called together a fuller list of members, or attracted more distinguished visitors from the North and East.

The papers read were of more than common worth, and the discussions provoked by them were full of pith and zest. The social features were worthy of the place and time, and the guests have departed bearing our best esteem, and holding, we trust, Louisville and its doctors in kindly remembrance. May they soon again be found knocking at our doors!

Our next issue will contain a stenographic report of the proceedings, and future issues will lay before our readers in full text some of the valuable papers read.

The funny little dispute between our State Board of Health and some gentlemen who differ with them as to the low or high sanitary state of the city goes on apace. Whew!
Notes and Queries.

Editors American Practitioner and News:

A CORRECTION.—In making a transcript of Dr. J. F. Purdom's paper on typhoid fever I discover that in two instances a few words were inadvertently omitted.

In your issue of November 5th, No. 179, page 291, second column, eighteenth line from the top, it should read as follows: "From this standpoint we can understand why the scientist has never been able to produce typhoid fever by inoculation, because the bacilli are powerless to produce the disease except through their action in the intestinal glands."

Also, on the same page, in same column, twentieth line from the bottom, it should read as follows: "The more favorable influence of the cold bath treatment over that of the internal administration of antipyretics is due to the fact that the latter have a more depressing effect upon the patient's vital forces, and the bath has a more stimulating effect through its action on the peripheral nerve supply; but neither have any influence on the bacillus, which explains why the bath treatment has never reduced the per cent of mortality due to perforation."

The correction is due Dr. Purdom, and I kindly request that in your next issue you make proper reference to the matter, as the blame rests entirely with me. I have told Dr. Purdom I would call your attention to the matter and ask that a correction be made, and I trust in justice to him you will do so.

C. C. MAPES,
Stenographer.

THE PHYSICIAN'S INFLUENCE IN DIPLOMACY. Compilers of social and political anecdote might put together an interesting and instructive volume upon the share physicians have had in moulding the opinions and determining the policy of monarchs or statesmen or diplomats to whom they were professionally attached. The published biographies of men high in official position teem with acknowledgments of what they have owed to their medical advisers, not in the matters of health only, but in the sphere of Statecraft. One of these which saw the light not so long ago—the charming "Memoirs of an ex-Minister"—contains a memorable passage in point. Lord Malmesbury, the Minister for Foreign Affairs under the Derby-Disraeli administration, and the author of the memoirs referred to, makes particular mention of the professional visits of Dr. Fergusson—the Robert Fergusson who figures so honorably in two such diverse books as Watson's "Practice of Physic" and Lockhart's "Life of Scott." His lordship had asked the doctor's opinion on the state of parties and the political outlook of the day, and, having got it, adds: "I fear he is right" [as undoubtedly he was], "for," proceeds Lord Malmesbury, "nobody is a better judge of public feeling than a doctor, who is constantly seeing all kinds of people." Another illustration, of a more dramatic though of a less satisfactory nature, meets us for the first time in a similar book just published, "The Diplomatic Reminiscences of Lord Augustus Loftus, P. C., G. C. B., 1837-1862." The Emperor Alexander, of Russia, brother of the Czar Nicholas, inherited a good deal of the eccentric character of their common father, Paul, whose assassination is one of the most tragic incidents in the somber page of Russian history. Alexander, it appears, had been privately informed of a conspiracy to take his life, and, acting on the information, had altered the route. He was then passing between Moscow and St. Petersburg. By shaping his journey homeward via Taganrog to the south he hoped to defeat the purpose of the conspirators. At that remote town he fell ill of "bilious fever," and in his suspicious frame of mind nothing would induce him to follow the advice of his excellent body physician, Dr. Wyllie. The doctor was reinforced by the entreaties of the Empress, but in vain. Alexander, seeming to court death, ordered a priest to be sent for, and meantime Dr. Wyllie and the Empress renewed their importunities to get him to take the remedy prescribed. This he finally agreed to do, and with the arrival of the priest renewed pressure was put upon him not to commit suicide by refusing the medicine. The priest, in fact, declined to do his part until the imperial patient acted on Dr. Wyllie's orders. To relieve local congestion leeches
were applied to the head, and after a time, the Emperor, sending for his consort and Dr. Wyllie, asked them if they were satisfied. They replied they were (for the time, at least); whereupon he tore off the leeches and by preventing their action seriously compromised his chances of recovery. The disease, in spite of the physician's efforts, had run its course, and the imperial patient died. Other anecdotes of Dr. Wyllie's association with the vic intime of the Russian court represent him in a more successful light, extra-professionally as well as in his medical capacity, and must, if collected from a favorable specimen of the volume we have suggested to the compiler—a volume which might have many an interesting counterpart drawn from the experience of others of his compatriots in their rôle as consultants to kings and their ministers.—London Lancet.

**Vaccination and Smallpox Mortality.**

It is a regrettable fact in the vaccination controversy that the opponents of this salutary measure should in their zeal to depreciate its value lose sight of essential principles. Thus, in a letter which appeared in The Times of the 19th inst., Major-General Phelps, of Birmingham, cites the fact, which he says he has verified, that each of the four fatal cases of smallpox occurring among adults in that town last year were of vaccinated persons, but that this fact was not noted on the certificates of death. We agree with him that such an omission is to be deplored, but his own letter shows that the evidence of vaccination was obliterated by the severity of the variolous eruption in at least two of the cases. Still, if he has been able to procure unequivocal evidence—no easy matter, especially for a prejudiced inquirer—from the relatives of the deceased, it might have been equally possible to gain this information at the time of the illness. It should not be inferred that because the fact of vaccination is not mentioned on the certificate these fatalities would be placed among the "unvaccinated class." There is a sort of feeling among the opponents of vaccination that the interests of truth are not regarded by the upholders of the practice! They also seem to think that the mere fact of vaccination having been performed at all is considered by the profession to be absolutely protective against fatal smallpox during the whole of life. If the former can show a mortality from this disease among the efficiently vaccinated at all approaching that among the nominally vaccinated and the unvaccinated, then, indeed, we may begin to question the efficacy of the practice. This demonstration can not be made. Vaccination, efficiently performed and reinforced by revaccination, is—in the healthy—almost absolutely protective against the ravages of smallpox. That has been proved up to the hilt. But it has also been shown that the conditions for producing so certain an immunity are not invariably observed—nay, even that unscrupulous persons encourage the poor and ignorant to obey the law in the letter, but to obviate the effects of vaccination by artifice. Year by year in this country the numbers of the unprotected are increasing, and they include not only the really unvaccinated, but the nominally vaccinated also. Lastly, mortality from smallpox, as from all infective diseases, is influenced by the previous habits, health and age of the subject, and when all such favoring conditions for severity are struck off from each column of the vaccinated and unvaccinated alike, the disproportion of fatalities and, indeed, of severity of attack between the two classes is so evident that no one not absolutely blinded by prejudice can fail to perceive where the safety lies.—Ibid.

**Some Horrors of Quackery.**—The old proverb "any port in a storm" has often found practical illustration in the empirical treatment of disease. Time was when even regular practitioners in the art of healing included in their professional armament, along with many simple remedies of real value, other matters the very mention of which might almost suffice to engender illness. We may feel thankful that we have now entered upon a later and more scientific era, and that such extraordinary drugs as weasels' gizzards, does' hoofs, snails and other even more repulsive horrors do not now find a place in any pharmacopoeia. There still exists, however, a species of medical folk-
lore, and some of its prescribed wisdom available for use in illness is of the most remarkable kind. Times of panic, by throwing a population to some extent on its own resources for treatment, are apt to create a demand for these survivals of a dark age. This happened lately in Germany, where a toad cooked with much care was swallowed as a cure for cholera. As to the result we are not informed. Most of us would probably choose to suffer rather than thus attempt our own relief. One can easily understand how such remedies as these have gained their favorable reception among ignorant persons. Used first in all likelihood, in some case of illness mistaken for an incurable disease, the nostrum has been followed by spontaneous healing, and has carried the stolen credit and the faith which goes with reputation to other sick bed-sides, sometimes with like spurious results. It can not be doubted that some such confidence in the horrors of empiricism lingers among our own poorer population, especially in country districts. In view of this fact the practice lately adopted by local vestries of inculcating active sanitary measures as the true preventive of infection and impressing the necessity of obtaining prompt medical aid can not be too highly commended.—Ibid.

Hamburg Water.—The results furnished by a chemical analysis of the water supplied to Hamburg admit of but one interpretation—the water is highly polluted, and it has thus no doubt afforded an excellent channel for the distribution of the disease which has cause sad havoc in the city the past season. A sample of water taken from the mains by an ordinary tap, just as it is supplied for drinking purposes to the houses, was recently procured by Mr. J. B. Coppock, F. C. S., who submitted it to analysis, the details of which appear in the current number of the Chemical News. The water is described as turbid and very yellow in appearance, as slightly unpleasant to the taste, as possessing little odor and containing a small and dirty looking deposit. Microscopic examination revealed animal and vegetable matters as well as mineral particles. The total solids amounted to 81.25 grains, the chlorine to 33.04 grains, the free ammonia to 0.0746 grain, the albuminoid ammonia to 0.0205 grain, the sulphates to 2.37 grains, and the nitrates to 1.95 grain per gallon. Oxygen consumed in fifteen minutes was equal to 0.065 grain, and in four hours to 0.24 grain per gallon. The most striking item is perhaps the chlorine. It occurs to an enormous extent, and may have been derived from the chlorides in animal evacuations, as in urine, although on the other hand there is no evidence that it is not of mineral origin. The nitrates do not appear to have been estimated, neither are any observations recorded as to the behavior of the solid matter on heating. This is regrettable, we think, as the presence of nitrates affords fair proof of the existence of putrefactive matter still undergoing oxidation, while the character of the odor evolved on heating the solid matter frequently indicates whether the contamination is of vegetable or animal origin. Cultivation in nutrient gelatine produced an abundant crop of bacteria—bacilli, micrococci, and fungi—but the consumption of the water, Mr. Coppock adds, has not produced any choleraic symptoms in the case of a cat. The water supply of Hamburg is drawn from the river Elbe. London, be it remarked, also derives her water supply mainly from a river, and although that river has hitherto yielded water of surprising purity after suitable treatment, yet in view of the present enormous rate of increase in the population not only is this source of supply likely to prove inefficient within a few years, but what is still worse, it will probably become less pure, in consequence of the increasing demands made upon an already overtaxed river by the present system of sewage disposal. A consideration of these facts, especially at this time, should lend fresh impetus to the labors of the Royal Commission, which will shortly resume its sittings.—Ibid.

Drunk or Dying.—The uncertainty of diagnosis in head injuries has once more been illustrated by a case that recently occurred at the San Francisco Receiving Hospital. On September 3, 1892, M. C. Shaw, aged thirty-seven, a civil engineer by profession, was
knocked down by a cable car. He was dazed by the blow, but seemed to recover consciousness in a few minutes. The patrol wagon was summoned, and though he protested he was not hurt, and wanted to go home, his friends thought best to bring him to the hospital. The assistant surgeon found several abrasions and contusions about the forehead, but no certain signs of serious injury. The patient, however, presented apparent symptoms of intoxication. He had walked into the hospital with a slightly unsteady gait, talked a great deal, declaring that it was nonsense to dress the abrasions on his head, took money from his pockets to pay the surgeon and steward for their trouble, and in many ways acted as an intoxicated person would. From the nature of the accident, however, the surgeon suspected that there might be internal injuries, and accordingly entered the diagnosis on the books as "doubtful." The man was placed in the hospital ward and kept for observation. He appeared to fall asleep at once, but never awoke. Six hours after entering he died. A post-mortem examination showed fracture at the base of the skull in the occipital bone. The external injuries were all in the fore part of the head, and as the occipital region showed no wound, the fracture was evidently from contrecoup — Occidental Medical Times, Sacramento Cal.

American Orthopedic Association.—At the recent meeting of the American Orthopedic Association, held in the city of New York September 20, 21, and 22, 1892, the following officers were elected to serve for the ensuing year: President, Dr. A. J. Steele, St. Louis; Vice Presidents, Dr. Samuel Ketch, New York, Dr. Arthur J. Gillette, St. Paul; Treasurer, Dr. A. B. Judson, New York; Secretary, Dr. John Ridlon, 34 Washington Street, Chicago. The next annual meeting will be held in St. Louis the third week in September, 1893.

Eminent Medical Men Dead.—The deaths of Dr. Thomas Attken, Edinburgh, Alfred Leech, M. B., M. R. C. P., Edinburgh, Dr. Paolo Fiorispine, of Rome, and Dr. Henri Gueneau De Mussy, of France, have been reported within the last eight weeks.

Special Notices.

Buffalo Lithia Water in the Treatment of Renal Calculi.—Dr. Albert Goodwin, of Eufaula, Alabama, states that for a number of years he has prescribed Buffalo lithia water, uniformly efficacious, resistant, in gout, rheumatic gout, rheumatism, and all diseases of a uric-acid diathesis. The extraordinary therapeutic value prompts him to report the following cases of renal calculi dependent upon a uric-acid diathesis relieved by its use after the failure of other approved treatment:

J. N. L., a cotton merchant, between forty-five and fifty years of age, was subject for six or seven years to frequent attacks of nephritic colic, and almost invariably passed a calculus after each paroxysm. The paroxysms finally became so frequent that the colic was almost constantly present, rendering his existence miserable. Of necessity, resort was had to opium and other anodynes, with a view to mitigating his intense suffering, until he became a confirmed victim of the morphine habit. His nervous system was shattered, and he was indeed a mere wreck. In this condition, by Dr. Goodwin's advice, he visited the Buffalo Lithia Springs, Virginia. For several months previous there had been a continuous pain in the right kidney, caused, as Dr. Goodwin thought, by retained calculi or incrustations in the pelvis of the kidney.

After a few weeks' use of the water of Spring No. 2 the beneficial results were very marked, the paroxysms became less frequent and of less severity, and there commenced a free discharge of calculi and sand, which continued for some three weeks, gradually diminishing and finally ceasing altogether. This was followed by rapid improvement in his general condition, and some weeks afterward he returned home in full and vigorous health, having gained while at the springs forty pounds in weight. By the continued use of the water after returning to his home he was enabled to overcome the morphine habit entirely, and lived for some years, having no return of his old disease.

This water proved not less efficacious in a similar case in Dr. Goodwin's own person. In October, 1890, he was attacked with nephritic colic of the severest type. Within a period of seven or eight weeks he had from fifteen to twenty paroxysms, none of them lasting less than two hours, and most of them from six to fourteen. The free and continued use of Buffalo lithia water resulted in a total cessation of the attacks, and the restoration of his general health, which had been much impaired. There has been no return of the attacks up to this date—August 15, 1892. He has prescribed this water in other similar cases with decided beneficial results, and has no hesitation in saying that as a remedy in such cases it has no equal among the medicines or mineral waters of which he has any knowledge. It is especially adapted, he says, to cases in men who are broken down by the long and continued use of alcohol and opium in their various forms.

The attention of our readers is called to the advertisement of Robinson-ckett Company, which appears in this journal. This house is one of long standing, and enjoys a reputation of the highest character. The preparations referred to, we commend specially to the notice of Practitioners.

Chronic Nervous Headache:

R. Celerina.................. 6 oz.
Tinct. Hyoscyamus........ 1 oz.
Tinct. Gelsemium.......... 1 oz.
M. et Sig. One teaspoonful taken before going to bed.
Original Articles.

[Continued from Page 336.]

INCIDENTS IN THE HISTORY OF MEDICINE, WITH SOME OF ITS SUPERSTITIONS, VAGARIES, HERESIES, AND ABSURDITIES.*

BY T. B. GREENLEY, M. D.

Many celebrated medical men succeeded Hippocrates. His two sons, Thesalius and Draco, with his son-in-law, Polybius, may be named.

Dioecles was regarded by the Athenians in the light of a second Hippocrates. Then comes Praxagoras, of Cos, the last of the Asclepiadse, who was distinguished for his anatomical knowledge. We may also name the celebrated philosophers Plato and Aristotle. They exerted great and well-merited influence over the people of their time, both in philosophy and medicine. They were the authors of two opposing doctrines in philosophy; the one contending that all ideas originate centrally, or in the brain, the other that they originate through the senses.

Aristotle was not only a great philosopher for the time in which he lived, but also a great physician. His system of philosophy as it respects the origin of ideas held its ground to a considerable extent down to the time of Locke, Bacon, and Kant.

He was the author of several works pertaining to medicine. Among them "His Master Piece," "The Experienced Midwife," "Book of Problems," and "His Last Legacy." The reader of these works will be astonished at his advanced ideas, and to find so much that is applicable at the present time in the management of labor as well as the treatment of disease. For his time in the world's history he was well posted in anatomy and physiology. In his "Master Piece" he pretty accurately describes the organs of generation, both in the male and female. He also, for his time, had a fair knowledge of the generation of the species.

Soon after the founding of the school in Alexandria the medical profession became divided into sects or factions, finally numbering four or five in character. They consisted of what was termed Dogmatism, Empiricism, Methodism, and Eclecticism. Dogmatism was instituted by Hippocrates, and was maintained down to Galen, A.D. 200. Galen claimed to modify the doctrine. Although he was very egotistical his theories in medicine prevailed for many centuries after his death. As evidence of his egotism I make the following quotation: "No one," he says, "before me, has given the true method of treating diseases. Hippocrates, I confess, has heretofore shown the path; but as he was the first to enter it, he was not able to go as far as he wished. The order he adopted is bad. He omits certain important indications, and has not made all the distinctions necessary. Often he is obscene, as is usually the case with ancients when they attempt to be concise. He says but very little of complicated diseases; in a word, he has only sketched what another has to complete; he has opened the path, but has left it for a successor to enlarge and make it plain."

Empiricism was arranged under three heads: (1) Personal observation, or autopsy; (2) the study of the observations collected by others, or history; (3) the inductions drawn from
autopsy and history which would serve to discover things for the moment concealed, but which has before been discovered. The last method was termed epilogism, or, in other words, consecutive reasoning, to indicate that it was deduced from anterior observation. At other times it was called analogy, because it rested on a similarity of features. These three sources of medical instruction, autopsy, history, and epilogism, formed the base, or what was termed the “tripod of empiricism.” This dogma came to be quite popular for a long time, but gradually in a few centuries declined, and finally became extinct.

The Methodists classified diseases as being due to three different states of the system: (1) The constrictive or contracted; (2) the relaxed or flexionary; and (3) the mixed. Hence there were only two therapeutic indications to fulfill—medicine to relax and medicine to restrict. They eschewed all harsh measures, and used but few surgical instruments. The dogma spread rapidly and became quite popular for a while, but soon faded out.

Eclecticism was claimed to be founded on principles of the other three sects—selecting what was regarded to be true from each, and rejecting what was, in their estimation, false. Some of their ideas were plausible, but they never became as popular as some of the other sects. The dogmatism, as founded by Hippocrates, and improved under the genius and influence of Galen, outlived the others, and remained the prevalent system of medicine through the Dark Ages.

From the time of the destruction of the library at Alexandria, in 640 A. D., by the Arabs, together with the spread of the barbarians over the Empire of the West, the progress of medicine was on the wane. We had no more Grecian authors of note. About the commencement of the tenth century some lights in medicine made their appearance, at the head of whom was Avicenna. He was the author of several works on medical subjects, and introduced some cathartics, sena, manna, cassia, etc., as substitutes for the more drastic substances.

From the time of the destruction of the Alexandria school medicine and surgery began to decline, and fell into irresponsible hands. There were no laws to prevent the most ignorant charlatans assuming the rôle of doctors.

Roger, the founder of the Kingdom of Sicily, in the twelfth century issued a decree for the protection of the people from the cupidity and ignorance of these medical corromitors. Under this ordinance all men who wished to practice medicine were compelled to obtain authority from the magistrates under penalty of imprisonment and confiscation of goods.

From this time many sovereigns followed his example in issuing ordinances to regulate the practice of medicine. Then followed the institution of medical faculties and university degrees. The school of Salerno was now established, which soon acquired great celebrity. On this account “Robert, Duke of Normandy, the son of the Conqueror, stopped there on his return from the Crusades to be treated for a wound of the arm.” The hygienic aphorisms of the school were transmitted to the King of England by its faculty. It begins as follows: “If you wish good health, banish despondency and avoid anger. Drink but little wine; eat light suppers, and do not disdain to take some exercise after meals. Do not sleep during the day. Do not retain too long the urine and evacuations from the bowels. By observing these precepts your life will be prolonged.”

In order to graduate at this school the student had to furnish a certificate of his legitimate birth, and that he had attained his twenty-fifth year. He was now examined publicly on the therapeutics of Galen, the first book of Avicenna, and the aphorisms of Hippocrates. He now took an oath to be faithful to good conduct, to submit to the rules of the profession, to give gratuitous attention to the poor, and not to share in the profits of the apothecary. Before he could commence the practice of medicine he was compelled to remain a year longer under an experienced physician. It might be well for the people of the present age if these salutary laws were now in force. It was about this time that medicine began to be divorced from the priesthood.

During the fourteenth and fifteenth centuries many universities were established in different
cities of Europe. From this time many lights in medicine made their appearance, but we can only name a few of them. Gerard, of Cremona, who was famous for his knowledge in philosophy and medicine. He traveled in many countries. William, of Salicet, was born in the thirteenth century, and was professor, first at Bologna, and afterward at Verona. Arnold de Villeneuve was a man of extensive learning. He wrote on medicine, theology, and chemistry.

Lanfranc was from Milan, and gave a great deal of his time to surgery.

John Petard was surgeon to Philip Le Bel, King of France. He left no writings.

Guy de Chauliac was the most famous of the surgeons and physicians during the Arabic period. He studied medicine at Montpellier. He left some writings of great value. During the prevalence of the plague in the fourteenth century he practiced at Avignon, and while everybody that could get away left, he said he could not run away for shame.

Medicine, however, as well as other branches of science, made but little advancement during what is termed the Dark Ages, numbering some eight centuries. This was due mainly to the fact that fanaticism and superstition prevailed to such an extent as to shroud the minds of the people in a veil of ignorance, thereby dimming any light of intelligence or science that might arise.

In the early part of the fifteenth century the cloud of ignorance and superstition began to disappear, which was greatly aided by the discovery of the art of printing in 1440. It was now that other sciences began to make advancement.

The first great physician of England was Linacre, of Canterbury. He, by hard study and observation in foreign countries, became famous, and was physician to Henry VIII, of England, and afterward to Queen Mary.

After the art of printing became general, medical works became more prevalent among physicians, and thereby medical knowledge more general. The first work on anatomy from observations made by dissection was published in the fifteenth century by Monnini, of Bologna. The prejudice against dissecting dead bodies was so great that it was a century later before permission was given by the Pope to the profession. It was during Henry VIII's time that, through the influence of such men as Linacre, medicine was divorced from the control of the bishops, who possessed the sole authority to issue license to practice medicine; and it seems that this was done without regard to education or qualification, being merely an act of favoritism. Hygiene, up to the time of the revival of letters, received but little attention. "Those who founded or endowed hospitals, asylums, and monasteries were not moved by thoughts of social amelioration, but by a pure sentiment of Christian charity or the fear of hell." All epidemic diseases, as well as other misfortunes which befell the people, were regarded as a punishment for sin by dispensation of Divine Providence. Hence no regard was paid to the laws which should govern health. Surgery was abandoned by the clergy, who were prevented from drawing blood by pontifical edict. Hence surgery fell into the hands of ignorant barbers and bonecutters. The practice of medicine was controlled by the clergy.

The first advance in obstetrics after the lapse of the Middle Ages was made by Guilleman, a pupil and friend of Ambrose Paré. He advised the termination of labor in case of hemorrhage or in puerperal convulsions. The cesarean section was known to the Greeks and Romans, but was abandoned during the Dark Ages, like many other operations. It was attempted to be re-established by several surgeons of the sixteenth century. A case is reported of one woman who was delivered successfully six times, and on the seventh lost her life. But little attention was given to clinics during that long, dark era.

Syphilis became epidemic in Italy and some other portions of Europe about the close of the fifteenth century. There were many theories as to its origin. Some thought it was due to epidemic constitution of the atmosphere; some to astrological causes; others to the dispensation of a wrathful Providence, as a punishment for unbridled libertinism; and yet others contended that it was imported into Europe by Columbus's men from the New World. This
theory seemed to be maintained for some time, until it was learned that it existed in Italy before the return of Columbus. But it is yet a mooted question with some what was its true origin. A disease somewhat similar prevailed many centuries before the New World was discovered.

Fernel, called the second Galen, flourished in the sixteenth century. He collected the principles of Hippocrates, Aristotle, Galen, Avicenna, etc., which were taught in the medical schools at this period throughout Europe. He contended that fever is an unnatural heat propagated from the heart to all parts of the body. Ephemeral fever resides especially in the vital spirit, of which the heart is the great reservoir. Synoeha, or continued fever, is situated in the humors of the heart and great veins. Hectic fever is fixed in the substance of the heart.

These doctrines of Fernel were firmly fixed in the minds of the profession of his day. Therapeutics were as greatly at fault as theories of disease. They were based on the principles of contraries and similars. Of course there were some innovations then, as there have been since. These attempted to revolutionize medicine under the head of occult or cabalistic science. The first of these of any note was Cornelius Agrippa. He was quite eccentric and variable in temper, and saw many ups and downs in life. Nevertheless, he was a man of genius. He regarded the arts and sciences, as then existing, as pernicious and injurious to common life, and very pestilential to the salvation of souls. He had great contempt for lawyers and physicians of his day, and but little respect for the female sex. In fact he had but little regard for anybody. He was the author of several works.

The second innovator was Jerome Cardan, of Pavia. His life, like that of Agrippa, was full of vicissitudes, and his character full of oddities. "He was a man of extraordinary mental power, and had he directed his capacities in a proper channel would have been one of the great men of his age. He believed in chiromancy and astrological signs, as well as the magical arts."

The third one of this class we will mention is Paracelus, who made a great noise in the world. He was born in Switzerland. He was very egotistical, opposed to everything stable in medicine or religion, believed in the cabalistic philosophy, and was, a drunkard. Nevertheless he was regarded as a genius, and acquired great celebrity. He claimed some merit as a surgeon, and wrote a work called "Great Surgery," in which Malagwine could find but one sensible passage. He discarded the four humors of the ancient system, but retained the four elements of the body, to wit, earth, fire, air, and water. The fire in man was the soul; the earth is represented by the dry parts; the water by the liquids; the air by what is called gas, which he termed vacuum. These four elements may cause diseases. But if we leave this high analysis of the more immediate elements, the body of man is composed of mercury, or liquor, of sulphur and of salt. And now see how this is demonstrated by alchemy: "There are, in the first place, in the body liquids—these are the mercury; then the solids which may be burnt, and the portion which burns is the sulphur, while the residue, or the ash, is the salt." He insists that the physician should have at his finger's ends the knowledge of the regions in man named (after constellations) dragon's tail, the ram, the polar axis, the meridian line, the east, and the west, etc. He claimed to be an expert on ulcers. He says ulcers all proceed from the consumption of the salt that is within us, and they vary in nature according to the variation of the salt itself. He therefore divides them into ulcers from niter, serofula, common salt, certain ulcers not painful, generally at the bend of the arm, or in the ham; ulcers from vitriol, corroding ulcers of the legs; ulcers from alum, gangrenous and fetid; ulcers from realgar; malignant ulcers of all species, etc. Then there are ulcers caused by celestial influence, or the corresponding constellation of the parts; or from special fluxes, and those which originate from chaos, or from the air which is in us; others are produced by enchantment.

He sometimes says all diseases arise from two sources, ex-cagastro and ex-iliastro. The diseases of the order ex-cagastro come from natural seeds, like pears, apples, and other kinds of
fruit; they are hydropsy, gout, jaundice, etc. The diseases of the order ex-iliastro are formed by the decomposition of something. In this order are comprised the plague, pleurisy, fever, etc. Sometimes he admits five causes of diseases, to which he gives the odd name of morbidic beings. The first of these causes is the Divinity himself, ens Dei; the second, the influence of the stars, ens astra; the third, the forces of nature, ens naturali; the fourth comprehended the errors of the imagination, evil influences, and enchantments under the denomination of ens spirituali; the ens veneni, comprising venoms and poisons, whether natural or artificial. He also claims another etiology; mercury, sulphur, salt here enjoy the role of universal nosogenic agents. He assures you that mercury, which is in the animal body, being in close relationship to ordinary quicksilver, produces by its volatility mania, mortification of the ligaments, tremblings, etc.; that if this volatility becomes excessive, or if it is joined to acrimony, mania, phrenzy, madness, etc., occur; if, on the contrary, the mercury is chilled, it causes trembling of the hands and feet, or of the head alone, lethargy, contortions of the mouth, eyes, etc. Sulphur produces various kinds of fever, apoplexy or phlegmous, jaundice, etc. In separating itself from the salt it causes pleurisy, inflammation of the stomach and liver, megrim, diseases of the eyes, toothache, earache, etc. The salt gives the colic, causes stone and gravel, gout of the feet and hands, sciatica, etc.; when it becomes dissolved it causes diarrhea; if it coagulates, it causes indurations, obstructions, etc.; if it volatilizes too soon it causes ulcers, the itch, pruritus, erysipelas, cancer, herpes, etc. This quotation only constitutes a part of his fantastic etiology and nosology, but sufficient to illustrate his nonsensical ideas. Antimony was one of his great remedies. He says it does not produce evacuation of the feces, but by its insensible action it drives out that which renders man impure, and, having purged the causes of diseases and ulcers, it brings man to a supreme degree of health. "Now, the most eminent philosophers have labored to prepare it, but in vain; nevertheless, it was finally perfectly elaborated, but I must say by my own efforts. This, then, is the great remedy with which we must commence all cures, because the ruin and destruction of many patients, caused by the errors and obstinacy of physicians, would thus be prevented." This quotation by way of showing his egotism.

[to be continued.]

TREATMENT OF UNUNITED FRACTURES BY RESECTION.*

BY W. O. ROBERTS, M. D.
Professor of Surgery in the Medical Department of the University of Louisville.

A. E., aged twenty-six years, a strong, healthy man, family history good, had been a railroader for six years. March 21, 1891, the train on which he was firing being derailed, he sustained a simple transverse fracture of the femur through its middle third. Temporary splints were applied, and he was sent to his home, a distance of three miles, in a spring-wagon. Immediately upon his arrival there the entire limb, including the hip, was put into a plaster of Paris bandage. At the end of two weeks the dressing, being loose from subsidence of swelling, was removed, and a similar one applied. This was not disturbed for five weeks. Upon its removal there was found free motion at the seat of fracture, and but little evidence of callus. There was seemingly no displacement of the fragments and no shortening of the limb. The thigh was now thoroughly rubbed and kneaded and a third plaster dressing applied. This was put on over a flannel bandage only. The patient's general condition continued good. He was now given the syrup of the hypophosphites, and directed to go about on crutches. During the following four weeks he was out of doors much of the time. At the end of the four weeks the limb was again examined and no improvement found. It was now put up in plaster for the fourth time, after having been thoroughly massaged, and the patient was directed to bear weight on the limb while using his crutches. At the end of another four weeks it was again examined, with a negative result. I now ordered for him a Smith's brace, which he got in five

*Read before the Southern Surgical and Gynecological Association, Louisville, November 16, 1892.
days. While it was being made the limb was well rubbed daily. Within a short time after the brace was put on he discarded one of his crutches for a cane. The brace was removed in six weeks, and little or no change could be detected at the seat of fracture. The fragments were in apposition, and the shortening was not more than one half inch. Dr. A. M. Vance now saw the case with me. Under chloroform, by forcible movements, we broke up the fibrous union and rubbed the fragments well together. The brace was then reapplied, and in a few days the patient was again on his crutches. He soon discovered that the limb was getting shorter.

Four weeks after the operation the limb was examined and found to be one inch short. There was no evidence now of the presence of callus. I advised a resection, but he decided to wait a while longer. In February he was present before the Louisville Surgical Society. The only change noticed in the limb was that it was one inch shorter than when last examined. He had worn the brace continuously, and he was then able to walk across the room with the aid of a cane simply. He used one crutch when on the street. Owing to his ability to get about so well with the brace, some of the gentlemen present advised against further operative interference. March 8, 1892, nearly one year after the fracture occurred, I did a resection, Drs. Vance, Dugan, Pearce, and Hecser assisting. A free incision was made on the outer side of the thigh. The fragments were found overlapping about two inches. There was not the slightest sign of union. Half an inch of bone was removed from the end of each fragment with a Bucher's saw, and an attempt made to approximate them, but one quarter inch more had to be taken from the lower fragment before this could be done. A hole was now drilled in each fragment, through which they were tied together with a few strands of silk-worm gut. The limb was then put in a plaster of Paris dressing. We endeavored to make the operation antiseptic. An abundance of iodiform and bichloride gauze was used in the dressing. On the day following his temperature was 101°F., but soon came down to normal. The pulse ranged from 80 to 90. On the tenth day the temperature reached 102°F., and the pulse 108. That night he had a sweat. On the morning of the eleventh day the temperature was 102°, and the pulse 112. On removal of the dressing pus welled out of the wound. There was very little swelling of the thigh, and no discoloration. The wound was now thoroughly irrigated with the peroxide of hydrogen, and a fresh dressing applied. The following morning a window was cut, so that the wound could be properly dressed. The temperature was now normal, and continued so. Irrigation with the peroxide of hydrogen was continued at intervals until suppuration ceased. At the end of nine weeks the wound had healed to a small fistulous tract, and good union of the fracture had taken place. The plaster dressing, however, was kept on for two weeks longer. The fistulous tract remained open until September 21st, when the silk-worm gut came away. The latter part of August several small fragments of bone came away. The limb now is as strong as the opposite one.

The treatment of ununited fracture by resection is more than a hundred years old. White, of Manchester, did the first operation in 1760. In consequence of the great mortality attending the operation it was abandoned until revived by Sir Benjamin Brodie. In 1805 Horeau, after having divided the fragments obliquely, fastened them together by carrying a metallic wire around them. Rogers, of New York, in 1838, passed the wire through holes drilled in the wall of the fragments, and then twisted it. Since then other surgeons have used sutures of various materials in the same way. Some of them leave the sutures in permanently, while others remove them after union of the fragments has occurred. Some, instead of drilling the bone, pass the sutures simply through the periosteum. Screws, nails, ivory pegs, and clamps have been used for the same purpose. Roux and Hamilton have tried wedging one fragment into the other. Bigelow and his followers attach great importance to dissecting up the periosteum, so as to preserve it, before removing the ends of the fragments. He reported, in 1868, eleven cases treated in this way with
only one failure. Macowan and others attach no importance to the preservation of the periosteum. Nussbaum, in 1875, operated by transplantation in a case of fracture of the ulna with loss of substance, cutting a portion of bone from the upper fragment, and without detaching the fibrous attachments he brought it down so as to fill up the gap. Since then aseptic pieces of bone from the lower animals have been successfully used to fill up the gap where there is loss of structure. Mr. John Chiene, in cases of loss of structure in fractures of the radius or ulna, removes a section from the opposite bone. In the long bones, when coaptation of the fragments can be secured, I feel satisfied that resection and a fixed dressing will be followed by just as good results as when sutures or other contrivances for fastening the ends of the fragments together are used.

In the Annals of Surgery for this month there appears an abstract of a paper by Dr. Henneque, of Paris, containing reports of five cases of pseudo-arthrosis, four of the humerus, and one of the thigh, in each of which two operations of resection and wiring the fragments together were done, all of which were unsuccessful. In his comments Dr. H. contends that, "When the fragments are in contact without interposition of foreign tissue, or when the interval separating them is slight, the suture is without influence in the formation of the osseous callus which will form, when the constitutional conditions of the patient are favorable, as well without as with the suture, but which will be wanting, notwithstanding the refreshing and suture of the fragments, if the system is under the influence of one of those tendencies, of the nature of which we are still ignorant, which renders it powerless to effect a bony union."

Treves states that he used the metallic suture at one time, but had good reason to give it up, and that he has had far better results since abandoning it.

As to the results of resection in the treatment of pseudo-arthrosis, Morris' table, which contains 150 cases, shows 113 cases and 6 deaths. All of the fatal results were in cases of fractures of the femur. Agnew's list contains 178 cases, with 104 cures and 11 deaths; of the fatal cases, eight were pseudo-arthrosis of the femur.

Societies.

SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.

Fifth Annual Meeting, held in Louisville, Kentucky, November 15, 16, and 17, 1892.

FIRST DAY—Morning Session.

The Association met in the Council Chamber of the City Hall, and was called to order at 9:30 A.M. by the President, Dr. J. McFadden Gaston, of Atlanta, Ga.

An Address of Welcome was delivered by Dr. L. S. McMurtry, of Louisville, Chairman of the Committee of Arrangements, the response to which was made by the President.

The first paper read was by Dr. Bedford Brown, of Alexandria, Va., entitled Personal Recollections of the late Dr. Benjamin W. Dudley, of Lexington, Kentucky, and His Surgical Work.

The speaker paid an eloquent tribute to Dr. Dudley, and characterized him as the greatest lithotomist that this country has ever produced, and the most successful in the history of the world. The speaker's close relationship to Dr. Dudley, as private pupil and assistant for two years, enabled him to present a clear and faithful sketch of his character and surgical work.

Experiences in Pelvic Surgery was the title of a paper read by Dr. A. V. L. Brokaw, of St. Louis, Mo. Of all the surgical problems difficult to solve, it may be truthfully said that those met with in the pelvis are the most trying. The speaker knew of no surgical work which will compare with the experiences found in the pelvis; a diversity of conditions, complications and unexpected happenings are ever presenting. In a series of many operations but few will be alike in every particular. As his experience became larger he was free to confess his inability to correctly diagnose the character of abdominal and pelvic troubles. He had diagnosed pus tubes and found extra-uterine pregnancy; diagnose ed extra-uterine pregnancy and found pus; diagnosed ovarian lesions and found the trouble located in the tubes, and vice versa. When well defined pelvic lesions exist, nothing short of radical measures
succeed. The lone condition above all others where exploratory incision should be adopted was in cases of suspected extra-uterine pregnancy. It was correct and good surgery to open the abdomen and not wait for all the classical signs to appear. The symptoms of extra-uterine pregnancy were so frequently unreliable and obscure that he was firmly convinced a radical position should be taken. A case was cited in point.

Dr. William Warren Potter, of Buffalo, desired to indorse that position of the paper pertaining to an early exploratory incision in cases of suspected extra-uterine pregnancy. As regards the use of the sound, he had brought an indictment against it some six or eight years ago, consequently he would not expatiate upon it at this time.

Dr. Joseph Taber Johnson, of Washington, said that as soon as the surgeon diagnosed something in the abdominal cavity that ought not to be there, anatomically or physiologically, and was histologically wrong, it should be removed. An exploratory operation was justifiable in cases of suspected extra-uterine pregnancy, and the surgeon should base his further procedures upon what he finds after making the exploration.

Dr. W. E. B. Davis, of Birmingham, Alabama, thought the pendulum relative to surgical interference had swung a little too far. He believed that a great many of the so-called "tinkerers," who succeeded in relieving their patients, did not accomplish it so much by the local treatment they used as by having patients under their care, keeping the bowels open, giving constitutional treatment, seeing them regularly, etc. While, by so doing, they might not be cured in all cases, they were greatly benefited. Regarding the diagnosis, surgeons who were opening the abdomen constantly would rarely give a positive diagnosis in the case. Dr. Davis cited the case of a woman who had an acute attack of peritonitis, and the history was the same as from pelvic abscess.

Dr. Brokaw, in closing the discussion, said that in every case of suspected extra-uterine pregnancy it was good surgery to make an exploratory incision and operate before rupture took place.

Dr. Cornelius Kollock, of Cheraw, S. C., read a paper on Craniotomy upon the Living Fetus is not Justifiable. He said this operation implied the death of the fetus and a frightful mutilation of its body, often accompanied by serious lacerations of the vagina and adjacent tissues of the mother. Recent advances in obstetrics, gynecology, and abdominal surgery contribute largely to a demonstration of the fact that a timely resort to cesarean section in pelvic obstruction is the great factor to success. In Germany, out of 149 cases of contracted pelvis, 109 and 136 children were saved. If craniotomy had been done in those cases, 149 children would have been destroyed, and probably fifty women, perhaps more, making a sacrifice of at least 199 lives. In many of these cases exhaustion had supervened and septic influences had already been excited. This, added to a tardy disposition to union by first intention, caused by contusion of the parts involved in the uterine incision, lessened materially the woman's chances for recovery. Zweifel was successful in 29 cases out of 30; Schauta did cesarean section 15 times without a single death. Recently in 18 operations done in Louisville 14 were successful. Of 8 in Ohio, 6 were successful. Dr. Price has done cesarean section a number of times successfully. Dr. Kollock is convinced that 85 or 90 per cent of the cases of obstruction of the pelvis forbidding delivery of the fetus in a natural way might be saved by a timely resort to cesarean section.

Dr. W. D. Haggard, of Nashville, emphasized the position taken by Dr. Kollock. He believes that when the profession fully realizes the immense difference in the number of lives saved by cesarean section over craniotomy, there will be no doubt as to the preference to the latter operation.

Dr. Hunter McGuire, of Richmond, favored cesarean section. Some time ago he saw the report of a case by Dr. Thomas, of New York, where in doing cesarean section he proposed to take the uterus out of the cavity and then open it. He thought this added very much to the danger of the operation, necessitating a larger opening, exposing the cavity of the abdomen a long time to the atmosphere, etc. He does not favor this procedure.
Dr. L. S. McMurtry, of Louisville, said that a few years ago it would have been impossible for one to have presented the views that Dr. Kollock had without meeting with violent opposition. Cesarean section was then regarded as an extremely heroic operation, and until recent years the mortality therefrom was very great; but since it has been carried to the present degree of perfection by Stenger and others it has strengthened the opinions of abdominal surgeons, who now consider it preferable to craniotomy. Within the last two months symphysiotomy had been brought before the profession and practiced as an alternative in certain cases for cesarean section. What the future of the former operation is to be we are not prepared to say.

Dr. Arch. Dixon, of Henderson, Kentucky, advised cesarean section in a case in which he was called in consultation, but the family physician insisted upon his doing craniotomy, which was done, and while every precaution was taken with regard to rendering aseptic the field of operation, the woman developed pelvic peritonitis and died within four days. He believed Porro's operation would have saved the life of the woman and perhaps that of the child.

Dr. W. D. Haggard, of Nashville, read a paper entitled A Case of Extensive Hematocele Resulting from Tubal Pregnancy Rupturing into the Broad Ligament. Although the fetus was not found, that it was a case of tubal pregnancy with rupture into the broad ligament is clearly established by the clinical history and post-mortem appearances, summarized as follows: (1) Patient confessed having had intra-pelvic trouble previously (presumably gonorrhreal), for which she was treated locally. (2) At the time of the accident, caused from jump from a wagon, her menses were past due. As to how long, her statements were misleading. (3) There was a fitful, yet persistent flow from the uterus during her entire illness. (4) Paroxysmal, colicky pains in lower abdominal and pelvic regions of frequent occurrence. (5) Existence of a tumor above the pubes, which she probably mistook for a gravid uterus. (6) Persistent refusal to submit to a digital examination, probably fearing the detection of her pregnant state.

**Post-Mortem Appearances.** (a) Enlarged and softened condition of the uterus with a patulous os, showing escape of a sero-sanguineous, stringy fluid. (b) Enlargement of the left tube with a well-defined cavity from which the fruit sac escaped. (c) Existence of a deciduous membrane, as revealed by the microscope. (d) Discoloration of rectum, produced by blood dissection around it, producing constriction and partial death.

Dr. S. M. Hogan, of Union Springs, Alabama, reported a case of Fibroid Tumor of the Uterus, Pregnancy, Rupture about the Fourth Month; Operation, Specimen. The woman, colored, was twenty-eight years of age, and from the symptoms and history of the case he was satisfied there was a rupture, and the probabilities were that it was at about the fourth month of gestation. He was also of the opinion that the rupture did not immediately destroy the fetus, that it continued to grow in its abnormal position. The speaker felt sure that if he had operated on the case immediately after rupture the patient's life would have been saved. In all cases of rupture we would advise Porro's operation to be done immediately; that in all cases, where the tumor is large or multiple, intramural or subperitoneal, with a saciform dilatation of the posterior segment of the uterus, and the os above the pubic bone or inaccessible, the same operation should be done. In all cases where the tumor is in front of the child, or blocking the passage, it should be done, provided the pregnancy has advanced to the full time, or there should be hemorrhage, or rupture of the membranes, indicating that an abortion or miscarriage is imminent.

**First Day—Afternoon Session.**

Dr. Geo. A. Baxter, of Chattanooga, Tenn., read a paper entitled A New Operation for the Radical Cure of Inguinal Hernia.

Dr. Baxter presented a radically different operation in principle from any yet given. It consists in a prolongation of the incision, after the ordinary management of the sac and after ligation, through the internal ring into a more or less extensive laparotomy, as the exigencies of the case demand, lifting the neck of the sac
into the abdominal opening above the ring, and its fixation there by a deep suturing, cutting off the sac close above the peritoneum, and its closure by buried suture, and a final closure of the abdominal opening by this and a more superficial set of sutures which pass across above the closed sac and peritoneum and underneath the deep fascia, which are intended to approximate the homologous tissues of the abdominal wall. The ring is closed with crucial sutures dipping over cord and traversing the tissues, and the seminal canal closed with deep sutures alone.

Points of originality claimed: A line of incision suitable for any inguinal hernia, and by the fixation of the sac above the peritoneum, a deflection of all abdominal expulsive force from the ring and canal, and the thickestened lining of the internal ring, and the method of closure of abdominal incision. Advantages claimed: Quick cure with avoidance of necessity of truss, deflection of expansive force from internal opening and canal to abdominal parietes. Advantage in being able to approach constriction either from without or within. Avoidance of necessity for traction on sac or contents. Ample room for treatment in diseased conditions of sac or contents, including gut operation, if necessary.

Dr. Henry O. Marcy, of Boston, followed with a paper on The Cure of Inguinal Hernia in the Male, in which he said until recently the cure of inguinal hernia in the male had been considered at the best accidental, and when apparently effected generally doubtful, and the hernia liable to return. The great majority of surgeons looked upon an attempt at cure as ill-advised, and believed operative measures should not be undertaken except in case of strangulation. Dr. Marcy thought there was abundant reason for such conclusion when judged from the earlier history of surgical procedures as attempted for cure. The essential surgical considerations for the cure of hernia were as follows: First, strict aseptic conditions. These pertain alike to all modern surgical procedures. Second, a free dissection. This is necessary in order to lay bare the internal ring, to permit of the enucleation of the peritoneal sac, and the separation and elevation of the cord out of the wound. The external epigastric artery often courses in the line of the incision. It is not seldom that the size of this vessel is such that the operator fears he has wounded the larger vessel. Third, the disposition of the sac. The separation of the sac to its very base before removal is to be recommended as the rule. There are times, however, when it is not easy to free the peritoneal pouch, owing to adhesions to the surrounding tissues, and in large, old, irreducible hernia more or less intimate fusion of the contents to the inner wall of the sac. It is generally better to open the sac before ligating or sewing through its neck, since by so doing the condition at the internal ring is assured, and by such knowledge the operator is often profited even if the sac is completely empty. Not seldom the omentum is adherent at the internal ring, and even a constricted loop of intestine may escape observation when it is attempted to return the sac unopened.

Dr. Marcy closed his paper by saying that between three and four millions of people living in the United States were subject to hernia; and, if the demonstration is complete, that the risk of life is less than 1 per cent from the operative procedures instituted for cure, and that scarcely more than 10 per cent are subject to relapses, and these almost invariably in a state improved by the operation, the plea is a very strong one to consider favorably the advisability of operation in a very large majority of all the sufferers from hernia.

Dr. W. H. Watthen, of Louisville, read a paper entitled The Treatment of Umbilical and Ventral Hernia. He said the importance of studying carefully the best methods of treating hernia is now especially emphasized because of the increased frequency of the disease following laparotomy, and especially because the modern methods of surgery make the operation far less dangerous than it formerly was. The operation for radical cure of hernia in the practice of the best surgeons, except in extreme cases, is practically devoid of danger, and the result may be made permanent. Modern aseptic and aseptic precautions have practically excluded the danger which formerly arose from infective peritonitis. The author said
there are many cases of ventral hernia that could have been prevented had the proper treatment been carried out in the closure of the abdominal wound. In order that there may be no hernia following laparotomy, it is necessary to get perfect union by adhesion of all the layers of tissue forming the abdominal wall—the peritoneum, muscles, the deep and superficial fascia, and the skin. But especially must we get union of the layers of fascia, for unless this is done the other layers will gradually separate, and hernia will follow. This can not be done unless we succeed in bringing the cut edges of the fascia in even and perfect apposition long enough for strong union to occur.

**SECOND DAY—MORNING SESSION.**

Dr. W. O. Roberts, of Louisville, read a paper on the Treatment of Ununited Fractures by Resection. He said the treatment of ununited fractures by resection was more than a hundred years old, White, of Manchester, having done the first operation in 1760. In consequence of the great mortality attending the operation, it was abandoned until revived by Sir Benjamin Brodie. In 1805 Horeau, after having divided the fragments obliquely, fastened them together by tying a metallic wire around them. Roger, of New York, in 1838, passed the wire through holes drilled in the wall of the fragment, and then twisted it. Since then other surgeons have used sutures of various materials in the same way, some of them leaving the sutures in permanency, while others removed them after union of the fragments had occurred. Some, instead of drilling the bone, passed the sutures simply through the periosteum. Screws, nails, ivory pegs, and clamps have been used for the same purpose. In the long bones, when coaptation of the fragments can be secured, Dr. Roberts feels satisfied that resection and a fixed dressing will be followed by just as good results as when sutures or other contrivances for fastening the ends of the fragment together are used.

Dr. W. C. Dugan, of Louisville, read a paper on Symptoms of Fracture, their Importance and Significance.

Dr. Bedford Brown, of Alexandria, Va., related the case of a boy who sustained a compound comminuted fracture of the skull in 1890, yet he was perfectly conscious, and had no symptoms of compression of the brain. The spicule of bone were removed, and recovery followed.

Dr. J. H. Letcher, of Henderson, Ky., advised against the too hasty resort to the use of the trephine and chisel in injuries of the skull.

Dr. C. Kollock, of Cherraw, S. C., had trephined in two cases with successful results.

Dr. J. H. McIntyre, of St. Louis, reported a case of traumatic insanity in a railroad employe, in which he trephined with success. The fracture was an extensive one, and occurred in the upper Rolandic region. He reported several other interesting cases.

Dr. William Warren Potter, of Buffalo, N. Y., called attention to fracture of the internal table of the skull without fracture of the external; hence the great liability to error in diagnosis.

Dr. Howard A. Kelly, of Baltimore, related the case of a man who fell and was brought to the Presbyterian Hospital in a comatose state. Careful examination revealed the fact that the man had diabetic cataract with fracture at the base of the skull.

Dr. William T. Briggs, of Nashville, had trephined in fifty cases of epilepsy. Four fifths of the cases operated on were relieved temporarily but not permanently.

Dr. T. A. Reamy, of Cincinnati, mentioned the case of a man who had fallen from the second story of a court-house, sustaining a fracture of the skull, but had never had epilepsy or a bad symptom following the injury. He thought this case would be some comfort to country practitioners who did not enlarge the scalp wound in all cases.

The papers were further discussed by Drs. Vance, Lyddon, Nicolson, Greenley, and Baxter, all of them favoring radical measures in the treatment of injuries of the skull.

Dr. L. S. McMurtry, of Louisville, read a paper entitled Ovarian Cystoma with Twisted Pedicle and Peritonitis; Ovariotomy in Second Week of Typhoid Fever—Recovery.

Dr. H. Horace Grant, of Louisville, contributed a paper on Intestinal Anastomosis by a New Device. For more than a year the speaker
had been endeavoring to perfect some instrument to simplify direct suture; but it has been so difficult to get just what he wanted, that time has not been allowed since the completion of the instrument to test it fully. It is to be used only after resections. The two blades of the clamp are oval scissors, one fourth of an inch in transverse and two and a half inches in longitudinal diameter. The arms of the clamp are made long enough to allow of introduction full five inches. After the gut is exposed a strand of iodoform gauze is passed through the mesentery, and constricts the intestine fully six inches from each point of intended resection. The mesentery is tied off over the portion to be resected with fine silk, in two-inch loops, cut close, and dropped in the usual way. When the resected portion is removed the gut ends may be washed out if desired. While the two ends of the divided intestine are held parallel, one blade is entered in each, allowing at least one and one half inches of gut beyond the proposed anastomotic opening, to permit of invagination of the ends. The clamp is tightened, and the two surfaces thus firmly held are rapidly stitched together by a continuous overhand Lembert suture of fine silk. Two rows of parallel sutures, as Abbe suggested, may be used if desired, though it has seemed that one is enough according to the author's experiments. The work can be done far more rapidly and accurately than without the clamp. When the suturing is finished the clamp is tightened if need be, and a long-bladed dressing forceps passed in the bowel, and the oval plug removed or pushed in. The scissors action of the blades, together with the ten or fifteen minutes' pressure, prevents any hemorrhage. The clamp is now withdrawn, and the ends invaginated in the usual way.

Dr. A. V. L. Brokaw, of St. Louis, thought the instrument exhibited by Dr. Grant a good one, and said that any thing which materially assists the surgeon in making intestinal anastomotic operations rapidly was of great value; that time was a most important element. The use of rings, plates, and mats in the past were bad. He believes that we can suture far more rapidly with Dr. Grant's instrument than any other device he has thus far seen.

Dr. W. E. B. Davis, of Birmingham, Ala., believes a large number of operators had abolished mechanical devices in doing intestinal anastomosis. His brother (Dr. John D. S. Davis) has devised a rubber plate and mat, but he now prefers not to use the plate. In the case of resection of the bowel, he thought the device of Dr. Grant was an ingenious one, inasmuch as it would facilitate the work of the surgeon and enable him to do an operation very quickly. He had conducted a series of experiments in an effort to do away with mechanical devices, by which surgeons might use the end-to-end operation by splitting up the bowel. While this operation was successful in some cases, the strain on the circulation was too great, and he now condemns the operation.

Dr. G. Frank Lydston, of Chicago, directed attention to Dr. J. B. Murphy's anastomosis button, a recent device, by which he says choledyceystenterostomies can be done in from eight to twelve minutes.

SECOND DAY—Afternoon Session.

The Association was called to order at 2:30 p. m., with the First Vice-President, Dr. C. Kollock, in the chair.

The President delivered his Annual Address. He took for his subject, Compatibility of Conservative and Aggressive Surgery. He said the circumspect philosophy of former days taught us, what man has done man may do. But the developments of more recent times say, whatever is practicable may be undertaken without regard to precedents. Conservative and aggressive processes are combined in progressive surgery. Conservatism in the use of all the appliances of surgery is not inconsistent with the application of the most energetic means of relief in structural disorders. A misapprehension exists with many of our profession as to the true sphere of progressive surgery, and it was the purpose of President Gaston on this occasion to make a distinction between rashness in the employment of operative measures and boldness in the use of surgical means of relief when clearly indicated. Real advances in surgical practice have not been the result of cutting and slashing without due consideration, but have accom-
panied the painstaking investigation of the conditions requiring the knife, and caution in the performance of operations. As a preliminary to any surgical procedure of a radical nature, correct diagnosis is essential; but to accomplish a proper understanding of a deep-seated disorder it is often requisite to make an exploratory operation of greater or less magnitude. The information based on such an exploratory measure serves as a guide to any further surgical procedure. Dr. Gaston said that ignorance and inexperience often lead to sad results in meddlesome surgery, when limbs are sacrificed or organs mutilated to gratify the desire to figure as a bold operator on the part of a would-be surgeon. In such cases no high-toned member of the profession should shield the culprit from the charge of malpractice or from the assessment of damages by a court of justice.

Dr. Apl Morgan Vance, of Louisville, read a paper entitled A Plea for More Rapid Surgical Work, in which he said a great number of surgeons pay little attention to the time consumed in an operation, or to the nicety of manipulation and dexterous use of the instruments that our forefathers prided themselves upon. He had seen on numerous occasions the work of our most distinguished surgeons, and had seen deaths occur from prolonged anesthesia and too much time consumed in operation which would not have taken place if much unnecessary time had not been wasted. The habit of starting the anesthetic before all preparations were completed was very reprehensible.

The paper was discussed by Drs. Arch. Dixon, Rufus B. Hall, George A. Baxter, and Edwin Ricketts, all endorsing the position taken by the essayist.

Dr. Charles A. L. Reed, of Cincinnati, contributed a paper entitled Surgery of the Ureters, with a Report of Cases. He said that surgery of the ureter is one of the developmental subjects of abdominal surgery. These out-of-the-way conduits, exercising functions that are vital in character, were liable to diseased conditions which baffle the resources of the diagnostician and tax the ingenuity of the operator. For purposes of diagnosis the physical means at our disposal may be briefly summarized as follows: (1) Exploration of the lower end of the ureter by digital examination, (a) through the vagina, (b) the rectum, and (c) the bladder; (2) Exploration of the lower end of the ureters by the sound passing through the urethra and bladder into the ureters; (3) Exploration of the central portion of the ureters by abdominal lumbar palpation—expedient of practical value only in cases of extreme ureteral distension occurring in very thin subjects; (4) Exploration of the upper end of the ureters by exploratory nephrotomy. Each of these several expedients might be amplified, but it would be uncalculated for in the presence of such distinguished members. Dr. Reed said that since catheterization of the ureters has been popularized in this country chiefly through Kelly, and since the technique of the procedure has become understood by those who have studied it, the diagnosis of disease within and surrounding these tubes is vastly more common. The digital exploration of that portion of the ureters lying within easy reach from the vagina or rectum is readily practiced by those who have carefully studied the anatomy of the parts. Digital exploration through the urethra and bladder is an easy expedient, so far as the surgeon is concerned, and often leads to the elucidation of important pathological facts, but the speaker is forced to believe that it is not without danger to the patient. He has been forced into this belief by one case of incontinence lasting for nearly a year, and by two cases of weakened power of retention, one of which is now of quite two years standing. Dr. Reed said that abdominal section for diagnosis of ureteral conditions, notably in cases of suspected calculus, is entirely justifiable. He then reported a case of periureteritis, stricture, kolpo-cysto-ureterotomy, with recovery. The second case was one of cicatrical stricture of an excised ureter, hydrenephrosis, nephrectomy, with recovery. The third case, one of pyo-nephrosis, nephrectomy, remaining urethral disease.

Dr. William Warren Potter, of Buffalo, read a paper entitled Specialism in Medicine, Particularly as Related to Surgery and Gynecology. He summarized his argument thus:
There is essential need for specialists. Divisions of labor in every field are demanded, and nowhere more than in medicine.

Specialists being a necessity, they must equip themselves by years of study, and devote themselves to a still greater number of years of general practice before they are justified in offering themselves as specialists.

They must conduct themselves in such a way as to merit the respect of the general practitioner and to invite his cooperation in their work.

The unwritten ethics of specialism demand that there shall be reciprocal relationship maintained, not only among specialists themselves, but also between specialists and general practitioners.

The opportunities for perfection in special lines of medical study are so great, and medical literature in both journalistic and textbook form so rich, that an awful responsibility it entailed.

The schools ought to discourage any and all students who give promise of entering upon the practice of a speciality as soon as the college doors are passed, and before the swaddling clothes of the professional tyro are slipped.

Dr. R. M. Cunningham, of Birmingham, Ala., followed with a paper entitled The General Practitioner as a Gynecologist. He said the general practitioner should not undertake work that can be better and more safely done by the specialist, provided one is obtainable. He should be willing to do and attempt the most radical and dangerous operations when necessary to save life, provided a specialist or one better prepared to do the work can not be obtained. In cases not necessarily dangerous, or in which life does not become more or less a burden, but in which a cure can be effected only by a radical procedure, but which may be materially benefited or symptomatically relieved by milder methods, he should adopt the latter and not the former. In many cases the field is clearly his own, belongs to him, and he should be prepared and competent to treat them with safety and success.

Dr. W. F. Westmoreland, of Atlanta, read a paper on Specialism in Medicine. He said there were two kinds of specialists, the one with preconceived ideas, which become warped, who always suffers from astigmatism, etc., who is a graduate of this kind. The other kind was the man who has worked his way by his generally acknowledged ability in any particular line.

Dr. Howard A. Kelly, of Baltimore, read a paper entitled A Preliminary Report on the Morphology of Ovarian and Myomatous Tumors. The speaker said the form of abdomen characteristic of large ovarian cysts is a globular or ovoid distension of a part of the abdominal wall, pushing out the infraumbilical portion much more than the suprumbilical, at least so long as the tumor occupies the lower half or two thirds of the abdomen. This enlargement is uniform in parovarian cysts and polycystic tumors exhibiting but few bosses, due to the fact that the latter are composed of one or two large cysts associated with a mass of smaller ones, and the large cyst is best accommodated in the median line in the distended concave anterior abdominal wall, while the smaller ones at the side or back consequently do not show. Prominent exceptions to the general rule just enunciated, that pelvic tumors distend most markedly the inferior abdominal zone, are the notable stretching of the upper abdomen in very fat women with large ovarian tumors, and the like distension in rachitic dwarfs in advanced pregnancy. Modular myomata, on the other hand, stand out in marked contrast to the smooth outlines of cystic tumors in giving to the lower abdomen a lumpy bossed appearance, thus exhibiting through muscles and skin a softened exaggeration of their irregular outline. This peculiarity still remains prominent, although softened, after these tumors have undergone fibrocystic degeneration.

Cystic tumors filling the pelvis and part of the abdomen are but rarely found to originate in some upper abdominal tumor. The speaker presented for demonstration a photograph of an enormous kidney, containing over a gallon of pus, extending from the pelvic floor up through the abdomen and pushing up the left rib.
THIRD DAY—MORNING SESSION.

Dr. A. M. Cartledge, of Louisville, read a paper entitled The Present Status of Drainage in Surgery. He presented the following summary:

1. The principal of artificial drainage in surgery, while very ancient, was imperfectly understood, and was oftentimes as much a factor for evil as for good.

2. Though our knowledge of the principles which govern a healthy regeneration of wounded structures has greatly advanced, and our progress in wound therapeutics kept pace, we fail to appreciate how artificial drainage can be altogether dispensed with in surgical practice.

3. To lessen the use of artificial drainage it is necessary to thoroughly apply the principles of asepsis and antisepsis, combined with buried sutures, fixation and alimentary or systemic drainage.

4. Where from any reason the production of a serum can not be controlled, its removal by drainage is a safer surgical measure than any attempt at sterilization in situ.

5. The time required for primary drainage is from twenty-four to sixty hours; to wait longer is to encourage trouble; to remove sooner than twenty-four hours is taking risks not warranted in the premises.

6. Capillary is to be preferred to tubular drainage in wounds other than those of the large cavities. For this purpose absorbable material should be selected, cutout being the best.

7. Where it is desirable to combine hemo-stasis and drainage in the same measure, the strips of iodoform gauze, as recommended by Mikulicz, fulfill a most useful purpose.

8. Where natural drainage can be utilized without producing unsightly cicatrices, artificial drainage should be dispensed with; when feasible, combine the two.

9. Wounds involving the brain and cord had best be drained to avoid mechanical violence to the functions of delicate structures by retained serum.

10. Necessity for artificial drainage will most often arise in wounds invading the large cavities, here inflexible tubular drains (glass) best meet the requirements, aided or not by materials acting by capillarity.

11. The method of secondary suture after primary wound secretion is over, advised by Kocher, seems to possess no advantage over drains that have to be removed, and certainly is not to be compared in convenience, comfort, etc., to the patient, to absorbable capillary drains.

Dr. William H. Myers, of Fort Wayne, Ind., read a paper on The Treatment of Tubercular Peritonitis. He said when we have arrived at the conclusion that peritonitis is present, and have discovered the cause, the blow must be struck simultaneously with the onset. No delay can safely be tolerated, the only hope of rescue being the sudden arrest of the disease. By the time that the normal outlines of the abdomen are secured by tympanitic distension, respiration quickened and shallow, the pulse rapid and wiry, the supreme movement for precise diagnosis is passed. Abdominal section for tubercular peritonitis was the most recent triumph of surgery. Dr. Myers had treated three cases of tubercular peritonitis by abdominal section, washing out the abdominal cavity and drainage, with complete recovery.

Dr. G. Frank Lydston, of Chicago, followed with a paper entitled Bacteriological Research in its Relations to the Surgery of the Genito-Urinary Organs. The author said that in his opinion modern bacteriological and pathological research has nowhere been more productive of scientific and practical progress than in the special field of genito-urinary surgery. He would not attempt to decide the question as to whether, under certain circumstances the microbial organisms which are constantly to be found in the secretions of the genito-urinary tract, are causal factors in pathogenesis of various forms; or, on the other hand, to decide the precise relation of hetero-genetic organism to the same morbid processes. The relation between what may be termed the normal germ and germs of non-pathogenic properties must certainly be left to the practical microbiologist. We are warranted, however, in drawing certain inferences and making certain practical deductions from what we know of the evolutionary laws of progression, differentiation and adaptation to environment. Many of the diverse forms of disease of mi-
microbial origin were doubtless embraced under the omnibus term of urinary infection. The present state of our knowledge does not admit of arbitrary differentiation between them. It is sufficient to say that many forms of organic and functional change affecting the genito-urinary tract are of microbial origin. These processes range in severity from a general infection with effusion and perhaps suppuration in joint cavities to so simple a local lesion as a chronic prostatic. The author quoted the the researches of such modern authors as Reginald Harrison, Halle, Rovsing, Krogius, Bumm, Albarran, and Guyon.

Dr. Joseph Taber Johnson, of Washington, D. C., read a paper entitled Ovariotomy in Old Women, in which he reported three cases, and felt quite sure that prolonged anesthesia and manipulation within the peritoneal cavity would have proved fatal. The first patient was sixty-seven years of age, and the tumor removed weighed fifty-two pounds. The second case was one of multilocular ovarian tumor. The patient was sixty-eight years of age, and the tumor weighed sixty-four pounds. On October 10th of this year he removed an ovarian tumor weighing fifty-six pounds from a lady who was sixty-seven years old, who looked to be one hundred. Improved methods, quicker operations, antiseptic technique and provisions against shock show thirty-eight recent cases between the ages of sixty-seven and eighty-two, with only two deaths against twenty-four cases, done twenty years ago, between the ages of sixty and sixty-seven with a record of six deaths. These figures demonstrate, in addition to improved technique, the surprising fact that old age is no contra-indication against ovariotomy.

Dr. Bedford Brown, of Alexandria, Va., read a paper entitled The Simple, Septic, Traumatic and Specific Forms of Cervicitis and Their Treatment. Simple cervicitis arises alone from simple causes. It never originates from infection of any kind. It could exist for an indefinite period without infecting surrounding structures. For many years the author in the treatment of this affection has addressed his remedies to the interior of the cervical canal alone, whether he used nitrate of silver, sulphate of copper, carbolic acid, or iodine. Septic cervicitis arises always from septic infection, and in itself becomes a center of septic infection for the pelvic structures connected by lymphatic communication. Contact with the os of portions of putrescent placenta, membranes, coagula or septic discharges from diseased uteri were the common causes. Antiseptic measures alone could counteract septic infection and inflammation, whether in the form of septiceemic fever or local inflammatory action. All other agencies were simply palliative or adjuvant in character. Traumatic cervicitis was simply inflammation and congestion of the cervix from wounds inflicted on the body either during labor, abortion, or from the use of dilating instruments. The author treats this form of cervicitis by means of a solution of nitrate of silver, varying in strength from a scruple to a half dram, applied in the canal and over the entire cervix. He finds that most of his cases of open and all of concealed wounds heal by this method. Specific cervicitis may arise either from gonorrheal or syphilitic infection. In the early stages he resorts to douches containing peroxide of hydrogen in the proportion of one part to three fourths of boiled water, and also permanganate of potash, one grain to the ounce of water.

Dr. James Evans, of Florence, S. C., contributed a paper on Shock. The speaker said in the severe injuries inflicted on the body by accident, and in the major operations of surgery, not the least element of danger to life is the condition known as shock which rapidly supervenes. The degree of shock is not determined solely by the extent and gravity of the physical injury. Certain idiosyncrasies of constitution, the character of the force which inflicted the injury, and the circumstances under which it occurred, are potent factors in its determination. Individuals of a highly wrought and exquisitely nervous organization bear pain with far less fortitude, and are more susceptible to shock than those of dull and obtuse intellects and blunted sensibilities. The author reported a case in point. In laying the foundation of a bridge across the Pee Dee River in South Carolina an immense block of
granite weighing over a ton was being lowered into a pit forty-four feet in depth, at the bottom of which was a man who was to direct when it was in proper position. When this huge block of stone was suspended over the pit the cable holding it began to slip, and the man below was warned to crouch in a corner, as it would inevitably fall. The rock did fall, and the man in the pit miraculously escaped without injury, but he was taken out in a perfectly lifeless condition and was exceedingly ill for more than a week.

Dr. George Ross, of Richmond, Va., read a paper entitled A Manipulative Mistake and its Consequences. The author related the case of a woman who had suffered from unremitting, agonizing tenesmus, the result of a mass which she carried for seven years in her bladder, and which proved to be, on inspection, a pledget of absorbent cotton once saturated with iodine, in shape a truncated cone, and thinly incrusted with phosphate of lime. The patient believed it was introduced by her first physician, who, when attempting to apply an intra-uterine dressing, mistook the urethra for the cervical canal.

Dr. William Perrin Nicolson, of Atlanta, made some remarks on Harelip Operations, in which he advocated the use of a simple suture instead of a pin, and also recommended parring the edges.

Dr. Edwin Ricketts, of Cincinnati, read a short paper entitled Cholecystotomy, with the report of a case. He had operated thirteen times for obstruction of the gall ducts. The patient, a lady thirty-four years of age, married, consulted him last June. She had never suffered markedly from jaundice nor from acute attacks of hepatic colic; no marked distension over the region of the gall-bladder, abdominal wall at least three inches in thickness, some general tenderness of the liver elicited by percussion. The patient had the characteristic putty-colored stools, and was losing flesh rapidly. The author advocated allowing a glass drainage-tube to remain in until the common duct was opened and then, if necessary, to make an anastomosis between the gall-bladder and the duodenum.

The following officers were elected: President, Dr. Bedford Brown, of Alexandria, Va; First Vice-President, Dr. Joseph Price, of Philadelphia; Second Vice-President, Dr. George A. Baxter, of Chattanooga; Secretary, Dr. W. E. B. Davis, of Birmingham, Ala.; Treasurer, Dr. Hardin P. Cochrane, of Birmingham.

Place of meeting, New Orleans, La. Time, second Tuesday in November, 1893. Chairman of the Committee of Arrangements, Dr. Albert Miles.

[Continued from page 342.]

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

SURGICAL SECTION, THURSDAY, 2 P.M.

The Surgical Section opened with the reading of a paper on Plica Polonica: An Inquiry into its Etiology, by Dr. A. H. Ohmann-Dumesnil, of St. Louis. The author stated that the disease is only occasionally observed in this country, and then gave a description of the symptoms of the disease. Women are more frequently affected than men, because they do not give the necessary attention to the care of their hair. However, he does not consider the disease a "filth" disease, and mentioned a case of a young woman in Texas walking a short distance barefooted, just after a rain and just after menstruation, thereby contracting the disease.

The paper was discussed by Dr. Owens, of Evansville; Dr. Drury, of Cincinnati; Dr. Lydston, of Chicago, and Dr. Ricketts, of Cincinnati. The discussion was then closed by the author.

Dr. W. W. Potter, of Buffalo, N. Y., read a paper on Puerperal Sepsis, its Prevention and Cure. The author emphasized that cleanliness is the only prevention of the condition, and that a woman must not only be made clean, but must be kept clean. He also mentioned the decrease in the mortality in the maternity hospitals within the last few years, and closed by saying that if the condition should produce abscess the abdomen should be opened and drained; and if the uterus should be affected it should be extirpated.

An illustration of the Modern Cesarean Sec-
tion, the Porro Operation, and the various Obstetrical Bandages, by Dr. E. Gustav Zinke, was next in order. The author stated that every practitioner, especially the country physician, ought to be familiar with both those operations. In the light of modern surgical improvements craniotomy upon the living child is little less than murder, which neither the consent of the mother or her friends can justify. He stated that the mortality of cesarean section has been greatly reduced, until it is now below that of craniotomy. The operations, cesarean section, the Porro operation, and the various obstetrical bandages were then illustrated upon manikins especially constructed for the purpose.

Dr. R. S. Sutton, of Pittsburgh, read a paper on Simplicity an Element of Success in Surgery, as follows:

"Nine years ago during a sojourn in Birmingham, England, I met, among other American visitors, Dr. Thomas A. Emmet, of New York. He asked me what Tait was doing; I replied he is curing by removal of the uterine appendages those cases which you have described as suffering from pelvic cellulitis. During that same visit to England Dr. Emmet and I had many conversations concerning Tait's work. On one occasion he said to me that if the same practice were followed in New York, "the women would die like coals falling off a shovel." Nine years have elapsed since this conversation occurred. American gynecologists have been converted from the doctrine of cellulitis to the doctrine of pelvic peritonitis, ovaritis, and salpingitis; they have been converted from a long and tedious process called local treatment, almost uniformly disappointing in its results, to the simplicity of a subparietal operation which removes the disease and almost always restores the woman to usefulness and the enjoyment of her daily life.

The prognostication by Dr. Emmet, justly ranked among America's most brilliant and progressive gynecologists, has not been verified. The statistics of the best operators in this country will bear favorable comparison with those of similar men abroad. Mr. Tait, in the first volume of his work, makes the statement that he knows of no more useless procedure than Emmet's cervix operation. If my opinion goes for any thing, I regard this expression of Mr. Tait's to be contrary to my experience, and that of a great mass of American gynecologists. Surely the simplicity of restoring a lacerated cervix and curing the woman in a fortnight was as great an advance upon former tedious and unsatisfactory treatment as was Mr. Tait's simple method of curing so-called chronic cellulitis in a fortnight, thereby doing away with the former tedious methods as advocated by Emmet.

"The simplicity of modern surgery extended to fibroid tumors of the uterus won among its votaries unquestionable success. The statistics of Thomas Keith were so overwhelmingly favorable as to withstand his statement at a later date (when he became an advocate of Apostoli's method), that he would almost as soon cut a woman's throat as to amputate her uterus for fibroid tumor. But the simplicity of the operation has been demonstrated by him, and stands to-day with less complexity of method, and, in the hands of the best operators, with a record of cures far in advance of and with a mortality not greater than the more recent method of Apostoli, which has been saved more by reason of the popular fear of surgical operations than any intrinsic value in the method itself. As surgical operations are deprived of machine tools and a multiplicity of complex devices for the attainment of simple ends, just so will surgical success increase. The familiar picture of two sportsmen, one with his modern breech-loader and complete outfit, and his game-bag empty, the other with his old muzzle loading gun and his daily rags for an outfit, but loaded down with game, is very suggestive of the picture of modern surgery. It is my conviction that about fifty per cent of modern surgical devices for the performing of operations are useless to the surgeon of fair average skill. I have heard of a surgeon who on one occasion attacked a paraovarian cyst with seventeen trays full of instruments, and who at the end of an hour and forty-five minutes, by the grace of God, completed the operation. Inasmuch as this surgeon was a man of wide experience, I concluded that the instruments were for display, and that
the time was consumed in making it. If this conclusion was erroneous, it was at least charitable. This subject is too wide to either cover it in a paper or to demonstrate all at this time. My object is to lay before you a table of seventy-eight cases of removal of uterine appendages with but one death, and to show you a small number of instruments with which I do all my abdominal surgery; to ask you to believe with me that one great reason for rapid advance in surgery in the last decade has been due to simplicity of instruments and methods, and to a greater development of skill on the part of surgeons.

"Since May 1, 1891, nearly all these cases have been done in Trendelenberg's posture. The advantages of this position are as follows:

"1. It is the safest position for narcosis.
"2. The intestines float into the upper part of the abdominal cavity unless restrained by adhesions.
"3. The latter, if they exist, are dealt with in plain sight.
"4. The intestines do not float out of the abdominal incision.
"5. A flat sponge withholds the intestines from the field of operation.
"6. The latter is in plain view; bleeding vessels are seen, and the relations of all parts visible.
"7. There is less hemorrhage.
"8. Subsequent flushing with hot water is not always necessary.
"9. Shock after operation is lessened.
"10. Peristalsis begins at an earlier period after operation.
"11. Packing the pelvis with gauze is more easily accomplished.

"The only disadvantage in this posture is that the abdominal incision required to obtain all its advantages is slightly longer than is necessary in the flat position."

Dr. Arthur W. Johnson, of Cincinnati, in discussing this paper characterized it as the most important, short, clear, and terse, as it was, that he had heard. Dr. Ed Ricketts, of Cincinnati, said that he who is simple in his work, and with it clean, is the one who will get the result here obtained—seventy-eight operations (laparotomies) with but one death.

In closing the discussion Dr. Sutton emphasized the short time necessary to perform the various operations—a reduction to almost one tenth of the time formerly required.

Dr. Hal C. Wyman, of Detroit, read a paper on Cholecystotomy. After giving a history of cholecystotomy the author enumerated the symptoms indicating the operation, including displacement of the gall bladder. He advised stitching the gall bladder to the edges of the peritoneum by the over and over method with sterilized catgut. Speaking of the injury produced by the escape of the bile, he said that we should fear the micro-organisms more than the bile, and advised thorough drainage.

The paper was discussed by Dr. Sutton, Dr. Edward Ricketts, and Dr. Murphy. The author then closed the discussion, saying that cholecystotomy is not a physiological experiment, but an operation for the treatment of a disease, and if made early, and the condition recognized before the common duct is destroyed, there can be no excuse for making two punctures in the gall bladder.

The meeting then adjourned to meet at 9 A. M. at Allemamia Hall, but the doctors were too well entertained at the reception given by the profession and friends at the Art Museum in the evening, and the Surgical Section did not get together until after the General Session next day.

MEDICAL SECTION, Thursday, October 13.

Dr. James G. Kiernan, of Chicago, read a paper on The Secondary Paranoias: their Relation to the Congenital Type and the Psychoses produced in Acute Diseases. In the course of his remarks he said, persons predisposed to insanity have been made so by contact and association with insane persons. This is most apt to occur in persons of blood relation. Over twelve years ago the author pointed out that paranoia was not exceptionally rare. He stated that insane persons, both in religion and finance, have influenced the mental faculties of some people. The author then went into a history of various religious, financial, and political movements which have been led by insane persons.

Dr. H. N. Moyer, of Chicago, then read a
paper on Traumatic Neurosis, with Special Reference to Spinal Concussion, So-called. The author said there is no more difficult chapter than that relating to traumatic neurosis, nor a subject the study of which has been burdened with more difficulties. He spoke of Erichsen's disease, and defined it as a group of subjective symptoms of concussion of the spinal column. However, there are cases resembling Erichsen's disease which have never sustained traumatism. The author claimed that Erichsen's disease occurred in other cases than those caused by trauma, where it was directly traceable to other causes which may have existed since childhood, possibly inherited.

Discussion was opened by Dr. Church, of Chicago, who said that there is no reason why symptoms which are associated should be elevated into a category by themselves. Dr. C. H. Hughes, of St. Louis, stated (only too truly) that many individuals who have been in a railway accident never cease to look for trouble afterward. The more medical men and lawyers they consult the worse their condition becomes. Dr. Entrenken thought that when damage suits for from $1,000 to $10,000 or more were decided adversely the patient frequently recovered.

In closing the discussion the author dwelt upon the difficulty of prognosis. The diagnosis is very difficult.

A Brief Study of Asiatic Cholera, by William A. Galloway, of Xenia, Ohio, was the paper next presented. The writer presented a succinct paper on Asiatic cholera. The discussion of the prophylaxis, pathology, and treatment was preceded by a short description of Koch's comma bacillus and its etiological influence, with a history of its recognition in 1883, during the epidemics in Egypt and India. The brief time allotted the paper (twenty minutes) prevented discussion of opposite views still held by some able writers, which fact was, however, noted. The well-accepted views of Koch were the etiological basis of the paper. Prophylaxis by means of rigorous quarantine and the most scrupulous care of person within and without, home, town, food, as well as the most rigid protection of water supply was urged as the sine qua non, the common observations of all physicians who had passed through former epidemics had been established to the extent that they came to the younger members of the profession as truisms. The paper discussed the experiments of Farrau and his associates in 1885 in prophylaxis by hypodermic injection of a pure culture of the comma bacillus, citing Farrau's remarkable results in experimentation on 30,500 out of 136,000 population of one district, with a net result of 3 deaths in 1,000 among the inoculated, to 33 deaths in 1,000 of the uninoculated. These figures, he thought, were of intense interest, and held out a hope for future prophylaxis from this source. A brief study of the pathology of cholera and its neurological features, with its clinical history, was followed by an urgent plea for the care of patients in the dangerous contagious premonitory diarrhea of cholera. The writer urged this period as the one which disseminated the disease. The enterocolitic and hypodermoclytic treatment of Prof. Cantani, of Naples, was discussed as of value if used early and courageously. The value of salol was suggested from some later experiments of Lowenthal, and results obtained by Dr. Salvador in the Phillipian Island epidemic, who recorded a death-rate of only 5.65 per cent. Morphia and stimulants were the most valued agents; the one giving needed rest from cramps, and the other sustaining the failing strength. The writer closed by saying that later epidemics had developed no remedy for cholera worthy the name of specific; nevertheless, in the remedies noted above he was hopeful that the profession had the ready means to valiantly and successfully guard its friends when cholera threatened their homes, fortunes, and their lives.

Dr. I. N. Love, of St. Louis, read a paper on Some Clinical Recollections of Cholera and its Treatment. The author stated that cholera patients are usually those whose nerves are weakened by whiskey and whose blood has been over stimulated. He advocated cleanliness. A person in perfect health, and clean is almost proof against cholera. The author spoke of the history of the disease in St. Louis in 1866 and 1867. Considering the sanitary condition at that time it was a wonder the
whole city was not wiped out. The author strongly advised the administration and injection (per rectum) of large quantities of hot water.

Dr. James T. Whittaker gave his experience with cholera since 1866. After giving a history of the various experiments for relief of the disease, the doctor said that the point in prophylaxis rests on the recognition of the earliest cases. There can be little hope of protection by inoculation, because a previous attack secures no immunity whatever.

Dr. Moyer, of Chicago, had never seen a case of cholera, and never expected to, because of the wonderful quarantine at New York. Dr. Hutchins spoke of the cause being in the intestine, and advocated local treatment. The doctor spoke of the mortality rates during the various epidemics.

Dr. Love then closed the discussion. Aside from the usual remedies, he suggested that whisky be given to brace up the physical condition, and above all give the patient that which is the sweetest thing in life, the sweetest word in the language, "rest," and opium gives rest.

Dr. C. G. Comegys said his first experience with Asiatic cholera was in 1849, and he had seen it in all its phases. A hypodermic injection of morphia will arrest the vomiting and diarrhoea promptly; dose one fourth grain, but the treatment must be continued. We must not think the patient is well because the diarrhea is stopped in two hours, for it will reappear. An antiseptic must be administered; mercury and tannic acid are good remedies; twenty grains of calomel, after the hypodermic injection, will arrest vomiting and purging.

In closing the discussion Dr. Galloway said that as cholera has already entered the port of New York he saw no reason why we should escape an epidemic next year. If we take the experience gained from many epidemics, how shall we treat it? Opium is lauded, opium is condemned; calomel is lauded, calomel is condemned; sanitary measures are lauded, and so on ad infinitum. After hearing the discussion he thought it demonstrated that hypodermic injections should be relied upon, and rest, which was spoken of so eloquently, must be secured if possible.

Dr. J. H. Kellogg, of Battle Creek, Mich., then read a very scientific paper on Methods of Precision in the Investigation of Digestive Disorders.

The paper consisted of a description of a new method of studying stomach fluids, perfected by Hayam and Winter, of Paris. It consists essentially in determining by exact quantitative analysis: (1) The amount of chlorine present in a given quantity (100 cubic centimeters) of stomach liquid; (2) the amount of free HCl, and (3) the amount of chlorine combined with albumen. The total acidity is determined by acidimetry and the coefficient of digestion. The known quantity is obtained by simple algebraic methods. The matter thus obtained is represented by symbols, as follows: Total acidity (A), the coefficient of digestion (a), total chlorine (T), free hydrochloric acid (H), combined chlorine (C). The normal quantities have been determined by study of stomach fluids obtained from healthy persons. It is easy to discover, by comparing the formula expressing the data obtained in a given case with a normal formula, the exact character of the disturbance, chemico-vital processes of digestion. For example, normal digestion could be expressed with the aid of the symbols employed by the following formula:

\[
A = a = T = H) \quad C) = Normal.
\]

If instead it presents the following formula:

\[
A + a + T + H + \quad C + \]

it is at once recognized that the case is one of hyperpepsia, while a formula like the following,

\[
A - a - T - H - \quad C -
\]

indicated a condition of hypopepsia. By the aid of this rapid method any deviation from the normal condition may be expressed. Dr. Kellogg reported the results of the analyses of nearly one hundred stomach fluids furnished by three hundred persons within the last year. The advantage claimed for the new classification presented was the fact that it shows not only the relation of the various forms of stomach disorder to each other, but shows at a glance the therapeutic changes also. Dr. Kellogg is always engaged in an extensive series of
researches for the purpose of determining the therapeutic value and application of various food substances—a branch of physiological investigation which has made little progress since the experiments of Beaumont on Alexis St. Martin, and a field which needs much to be explored, as there is little or no exact knowledge possessed by the profession upon this subject at the present time.

**GENERAL SESSION, FRIDAY MORNING, OCT. 14.**

The session was called to order by the President, and the report of the Secretary heard. After this the Committee on Nominations reported the following officers of the Mississippi Valley Medical Association for the ensuing year:

President, R. Stansbury Sutton, Pennsylvania; First Vice-President, W. N. Wishard, Indiana; Second Vice-President, W. S. Christopher, Illinois; Secretary, T. V. Fitzpatrick, Ohio; Treasurer, A. M. Owen, Indiana.

Chairman Committee Arrangements: F. C. Woodburn.

Committee on Credentials: C. S. Bond, Chairman, Indiana; I. N. Love, Missouri; J. B. Murphy, Illinois; T. H. Stucky, Kentucky.

Judicial Council: Theodore Potter, Indiana; C. A. L. Reed, Ohio; C. H. Hughes, Missouri; W. H. Daly, Pennsylvania.

Place of meeting, Indianapolis.

The next in order was the President's Address.

The author spoke of operations for ovarian tumors, and stated that electricity is not a practical remedy when there is disease present, the author claiming that the only thing practical is to operate at the earliest possible moment after a diagnosis had been made. He mentioned that the art (hysterectomy) originated within a few leagues of Cincinnati (of which fact he was justly proud), and was perfected by the great school of which Tait is the leader. The removal of undiseased organs is not practiced by reputable surgeons, and moreover the great mortality from extirpation of the appendages should not be ascribed to the bunglesomeness of the surgeon, but to the practising physician, for in the hands of the surgeon the mortality rate is only from 6 to 8 per cent. The doctor then described some cases upon which he had performed ovariotomy, the results of which showed clearly that the President of the Mississippi Valley Medical Association was not "bunglesome." He also mentioned twenty-five cases of cancer in which he had performed hysterectomy with but two primary deaths. The President then spoke strongly in favor of the employment of good surgeons in the institutions for the insane, that the unfortunate inmates might have the full benefit of science.

At the close of his address the President introduced the coming President, Dr. Sutton, of Pennsylvania.

Dr. Lydston then moved a vote of thanks to the profession of Cincinnati for their attention during the stay of the Convention in this city, to which the President replied, upon behalf of the profession of Cincinnati, that they were glad to have the opportunity to entertain so many eminent members of the profession.

The session then adjourned.

**SURGICAL SECTION, FRIDAY, OCTOBER 14TH— SPECIAL SESSION.**

The Section was called to order, and Dr. Walter A. Suiter, of Herkimer, N. Y., read a paper entitled Clinical Experience Illustrating the Value of Conservatism as to the Surgical Treatment of Appendicitis, and reported an interesting case of dislocation of the knee-joint, which was accepted without discussion.

Dr. G. Frank Lydston, of Chicago, then presented a paper on Inflammation of the Caput Coli. A surgeon is apt to say that all inflammation about the caput coli should be operated upon, while the practising physician is apt to lend too great support to conservatism. The author took a middle position. It has been suggested that the only salvation for the female is the taking away of the appendages as soon after birth as possible, and, since rats can be born without tails, the author did not doubt that this would be practicable. He then mentioned a division of opinion as to whether abscess of the caput coli should be considered intra-peritoneal or not. He also stated that a tumor which is out of reach may burrow so as to come within touch. The author believed
that gangrene and puncture of the appendix may occur without suppuration. The diagnosis of perityphlitic abscess is not always easy, and the author mentioned a case which recovered from apparent perityphlitic abscess after the discharge of a large amount of feces. He concluded by enumerating the principal symptoms of the disease, and especially emphasizing that the setting in of gangrene in children is too often considered an idiopathic abscess.

The paper was discussed by Dr. C. A. L. Reed, of Cincinnati, and Dr. Murphy, of Chicago, and the discussion closed by the author.

Dr. H. O. Walker, of Detroit, Mich., read a paper on Excision of the Scapula for Malignant Disease, Amputation at Hip-Joint, Wyeth’s Method for Osteo-Sarcoma of Femur, with specimen. The specimen shown was supposed to be cancerous, and was a tumor which had been removed from a man about thirty-five years of age. The operation was performed September 7th, this year. There was no rise of temperature, except at the drainage-tube, where a stitch-hole abscess formed. Statistics show that the operation is not as dangerous as where a portion of the clavicle or the humerus is removed. The author then reported a case of a boy who had been kicked in the left groin. A swelling was noticed in February, and a hip-joint amputation performed in September. The temperature never went above 100°, and the patient will go to his home in Canada shortly.

On motion, the session adjourned.

**Surgical Section, Friday, October 14th—Afternoon.**

The Surgical Section met in regular session at 2 o’clock in the afternoon, and Dr. Ransohoff reported a case of sarcoma of the chest wall, with presentation of patient. The growth, about the size of a man’s fist, was attached to the pleura, but did not form a part of it. However, it was necessary to remove the pleura from the whole area in order to take away the tumor. After the removal there was the usual collapse of the lung, and with it the collapse of the circulatory movements, so that the process of anesthesia had to be discontinued for awhile. After this the operation was finished without further trouble. The patient did remarkably well until the fourth day after the operation, when the dressings were stained with blood, and when the tampon of gauze was removed there was an immense flow of blood. The greater part of the wound healed by first intention, and the author thought if the patient recovered from the operation, as no doubt he will, he would have a good chance to become as well as ever.

Dr. W. H. Daly, of Pittsburgh, read a paper entitled A Clinical Study of Glanders, in which he gave his experience in a number of experiments upon horses affected with glanders. The author treated the horses as one would a three-hundred-pound man. In six cases inoculated with the extract of the bacillus of glanders all of the horses showed the disease except a foal.

Dr. J. L. Murphy, of Chicago, then illustrated a New Method of Intestinal Anastomosis and End to Approximation without Suture, illustrated on a dog.

He has performed the various joinings of the intestines, stomach, and gall bladder, and showed specimens illustrating the result procured. By his method, which is the bringing together of the parts by a kind of metal button, one is able to perform these operations in very much less time than by the ordinary methods.

**Medical Section, October 14, 1892.**

Dr. Joseph Eichberg, of Cincinnati, opened the session with a paper on Experiments with Modified Tubereculin, and said the lamentable failure of the original Koch treatment is still fresh in the medical mind. It received the faith of the profession. Few in the profession would question any statements emanating from such a man as Koch. There could be no doubt of the wonderful effects of the new remedy, but their duration was brief. Experiments were made to find out which were the properties of the lymph that healed and those that irritated. Two have been eminently successful in these experiments, viz., Klebs and Hunter. Klebs kept secret the method of his preparation, which, however, he allowed to be
sold in the open market. In the case of Hunter, who made the most careful chemical analysis, and succeeded in isolating from it a number of substances which he designated as modifications A, B, C, D, etc. Of these modifications the one designated B seemed, in his experiments, to be attended with fewer unpleasant results than any other. He at once published his results, and also the method of preparing his modification. It is this preparation which has been used in our experiments, and the same has received the indorsement of Dr. Kinnicut, of St. Luke's Hospital, New York. In the experiments the injection should not give rise to any local reaction followed by fever. The doses should be regular. Careful and repeated observation of the pulse and temperature should be made. The experiments prove that the remedy is worthy of a more extended trial. The injections were made daily, by means of a syringe, between the shoulder blades. All instruments were sterilized, and only pure (boiled) water used. The solution was received and kept in sterilized glass stopper jars. The author then gave details of several cases that had been treated, and noted the improvement. In not a single instance could it be said that death had been hastened by injection, and in no case was hemorrhage observed to follow the injection. All the patients declared they felt better, breathed with more freedom, the weight seemed to be lifted from the chest, and the general condition seemed to be better.

Dr. Max Thorner then read a paper entitled The Treatment of Tuberculosis of the Larynx with Modified Tuberculin.

Tuberculosis of the larynx was considered, until about twelve years ago, an absolutely incurable disease. Since that time a number of competent observers have shown that in a very small number of cases a cure may be obtained. More was effected by the lactic acid and the surgical treatment than by any other treatment. Koch's tuberculin has not done for the larynx what had been expected. In fact the effect of the lymph was, in a great many cases, disastrous. The laryngeal affection did mostly not improve, and in some cases tracheotomy became necessary. Since about six weeks, experiments had been carried on by the author with Hunter's modification of tuberculin, and while the number of cases (two) was too small, and the time of observation as yet too limited to arrive at any definite conclusions, the results obtained so far were very encouraging. In both cases the initial dose was $2\frac{1}{2}$ milligrams, increased in one case gradually to 100, in the other to 35 milligrams. In the first the temperature was only once to 100.4°; at all other times, as well as in the second case, it ranged steadily between 95° and 99.6°. The local improvement was pronounced in both cases, swellings decreased in size, superficial ulcers healed. At no time was there any severe reaction, neither locally nor generally.

Dr. H. Longstreet Taylor, of Asheville, N. C., read a paper entitled The Shurley-Gibbes Treatment of Tuberculosis. We are now in the midst of an epoch big with promise in the treatment of this disease. The premature announcement of Koch's work on the subject has been the most dramatic event in the history of medicine. Much good will certainly come from this work, but we must wait patiently and accept whatever observations are made while the problem is being solved. The patient should do every thing to keep up the condition of the stomach, and take nothing that could possibly nauseate, as he has need of every drop of milk and beef that he can assimilate. The author desired to call attention to the Shurley-Gibbes treatment, because in his opinion it offers to us the most certain control over the advance of the disease. It has been before the profession for some time, but has not been generally received, because it was advanced about the time of Koch's discovery, and so many had their faith tried then that they hesitate to take up another discovery. Two years have passed; numerous cases have been carefully reported and recorded by careful men. Prof. Shurley-Gibbes has reported a series of cases; a year ago the author reported twenty-two cases, and last spring the originators reported thirty cases in which the treatment had effected a cure. In one half the cases the bacilli disappeared or were greatly reduced in number, and a summary of all the cases shows forty-eight per cent of practically
well patients. The patient should be given a change of air and food. Those away from home should have constant medical attention.

Discussion on the three previous papers was opened by Dr. J. A. Thompson, who said all the prominent methods of treatment of pulmonary tuberculosis had been considered except one, that first introduced by Mr. Walter Dowey, of Glasgow, of using menthol and diathol. When menthol is first injected a burning sensation is experienced that is perhaps uncomfortable to the patient for about two minutes, sometimes producing a slight cough; but this slight burning sensation is succeeded by an agreeable sensation of warmth. This treatment is certainly worthy of trial.

Dr. A. B. Thrasher, of Cincinnati, earnestly advocated a change of air, good hygienic surroundings, and thought much of the good claimed by the exponents of the different modes of treatment was due to these causes.

Dr. Joseph Eichberg appreciated the advantages of fresh air, good food, and hygienic conditions, and thought it was all the more creditable to the remedy if the experiment was made in a hospital, where the patients were unable to leave their beds, and they improved, which could be verified by individual history.

Dr. Max Thorne said putting the patients under the best hygienic conditions possible was a very important part of the treatment, but we could not deny the fact that the patients improved under the treatment suggested when it has been verified by competent observers that the local condition improved, and weight gained from five to twenty pounds within a few weeks.

Dr. Longstreet Taylor thought it was necessary to keep the respiratory tract in good condition. However, when a case will gain fifteen or twenty pounds in a few months there must be something at work besides climatic change.

The Prevention of Blindness by the Simulation of Ophthalmia Neonatorum was the title of a paper read by Dr. C. S. Ayres, of Cincinnati. This is a disease which prevails at all times of the year. It is naturally self-limited, and if properly treated there is no reason why blindness should result. Preventive measures should begin at the birth of the child. Symptoms of conjunctiva irritation show themselves within a day or two after birth, being caused by secretions from the vagina during the passage of the head, or while the child is being washed. The author then gave a history of the attempts to stamp out the disease. The only hope is in prophylaxis. The author gave statistics from various parts of Europe showing the value of prophylactic treatment. The physician in charge, as well as the midwife, should give attention to the eyes during labor. The doctor strongly advised the passing of laws, if necessary, to insure cases of this disease being properly attended.

Dr. Dowling advised united action. The instruction of members by health boards does not do much good unless a penalty be imposed. A ten-per-cent solution of nitrate of silver is probably a better remedy than a light solution. Dr. A. M. Jones thought there were enough laws of this character, and some responsibility ought to rest on those who bring the child into the world.

Dr. Francis Dowling, of Cincinnati, read a paper on The Effects of Tobacco on the Vision, and gave the results of the examination of fifteen hundred employes of Cincinnati tobacco factories. The majority showed evidence of contraction of the pupils. The author presented letters from Dr. Galesowrie and Dr. Landolt, of Paris, in support of the view that tobacco affects the vision.

Dr. A. M. Jones, Eaton, Ohio, read a very interesting paper on The Use of Hypnotics. After stating that the object of every physician should be to reduce the amount of suffering in the human family the author went into a discussion of the diseases requiring the administration of hypnotics. The word should be understood as referring only to hypnotic drugs. We should administer the hypnotic most apt to be useful in a given case, and not be prejudiced in the selection. Morphine, either alone or in combination with aconite, and other forms of opium may be mentioned as good hypnotics. Alcohol is a powerful hypnotic in any form, cocaine is useful in some cases, and chloral has also been recommended.
Abstracts and Selections.

The Diagnosis of Chronic Bright's Disease.—When Richard Bright first described "Bright's disease," it was a very simple affair. But one form was recognized. A man who was anemic and dropical and passing albuminous urine was said to have "Bright's disease of the kidneys." Further study and investigation made the subject as complex as it had been simple before. About ten years ago—when we attended lectures—they used to describe the large white kidney, the small white kidney, the amyloid kidney, the large red kidney, and the small red kidney—two varieties of the latter—one corresponding to the atrophic stage of the large variety, and the other to what is known as the cirrhotic kidney now, and the clinical description was made to tally with the morbid anatomy.

To-day the whole subject has been much simplified again. We know now that the difference between the large red and the large white kidney is simply one of degree of engorgement with blood, and that the small red and the small white varieties are only a later stage, or the stage of atrophy, of the two former varieties, and that the amyloid kidney is only one form of chronic parenchymatous nephritis with the peculiar amyloid degeneration of chronic suppuration. So the pathologists now classify the lesions of chronic nephritis into two classes, viz: Chronic parenchymatous nephritis and chronic interstitial nephritis, and in speaking of diagnosis we will follow the same classification, for the two types differ more clinically than do the gross or microscopic appearance of the kidneys.

We will first consider chronic parenchymatous nephritis. I believe that most physicians diagnose this form correctly and early. Although none of the symptoms, with the exception of albuminuric retinitis, is peculiar to Bright's disease, yet the anemia, the dropsy, the persistent headache and nausea, the dyspnea, etc., when taken together, will nearly always arouse the suspicion of Bright's disease and lead to the examination of the urine. In this form of nephritis this will nearly always furnish ample proof of the presence of disease of the kidneys. There has been much discussion of late as to the significance of albuminuria, but the best authorities agree that a definite amount of albumen persistently eliminated with the urine must be regarded as something pathological. As to the best method of detecting the presence of albumen in the urine, many methods are given in the books, but the heat and nitric acid test, so familiar to you all, is as good as any, and answers every purpose. Two mistakes may be made on heating the urine; the triple phosphates yield a precipitate or rather a cloudiness very much like that of albumen, but the addition of a few drops of strong nitric acid will redissolve the phosphates while it will intensify the albuminous deposit. Again, there may be an albuminous deposit from the presence of pus or blood mixed with urine outside the kidney, and known as spurious albuminuria. If there is enough blood or pus, the red color of the one and the characteristic tenacious sediment of the latter will enable the naked eye to detect the source of the albumen. If the quantity of either is small, the microscope should be used and the presence of blood cells or pus corpuscles will settle the question. If the urine is albuminous it should be allowed to settle in a conical glass and the sediment examined for casts. The presence of these is proof positive of a nephritis. A great variety of these are described and pictured in the books, but the hyaline cylinders are the commonest and most important forms, and are really the ground-work of all the other varieties. They are perfectly homogeneous, colorless, and are formed by the coagulation of the exudation into the uriniferous tubules. If there is desquamation of the epithelium lining the tubules, the epithelial cells adhere to the hyaline cylinder of coagulated albumen, and we have the so-called epithelial casts. If the cast is covered with red-blood corpuscles, it is evidence of hemorrhage in the kidney itself. Again, fatty and granular casts point to fatty and granular degeneration respectively of the epithelial cells. And so casts not only prove absolutely that there is a destructive inflammation going on in the kidney, but their variety tells a great deal about the character of the process going on.

We now come to the consideration of chronic interstitial nephritis—the other variety—of chronic Bright's disease. I said it was the rule for chronic parenchymatous nephritis to be correctly diagnosed, and that early in the history of the disease. I regret to say it is the exception for a correct diagnosis to be made in this form, at any rate early in its history. Many of these cases die of pneumonia or cerebral hemorrhage—to which they are particularly liable—without the kidney lesion ever being suspected. The symptoms are never obtrusive as in chronic parenchymatous nephritis, but may remain obscure for a long time. As one author says, "Even an advanced grade of contracted kidney may be compatible with great mental and bodily activity." Simultaneously with the atrophy of the glomeruli of the kidney a remarkable change takes place in
that offered by the pulse is the most important." "Persistent high tension, with thickening of the arterial wall in a man under fifty means that serious mischief has already taken place, that cardio-vascular changes are certainly, and renal most probably, present."—J. D. Jones, in N. Y. Med. Examiner.

PEROXIDE OF HYDROGEN IN GASTRIC DISTURBANCES.—A. N. Iakovleff (St. Petersburg Inaugural Dissertation, 1892, No. 109) has made nine experiments on eight subjects, of whom some were suffering from chronic gastritis, some from nervous dyspepsia, one from cancer of the stomach, and one from hyperacidity of the gastric juice, while the eighth was healthy. In all but two cases the patients were given 4 c. c. of a three-per cent solution of \( \text{H}_2\text{O}_2 \) before breakfast, dinner, and supper. The patient with malignant disease and the one with hyperacidity took a two-per cent solution, 4 c. c. from three to six times a day. The following is a summary of the results of these experiments: (1) Under the influence of \( \text{H}_2\text{O}_2 \), the general acidity of the gastric juice and the proportion of free \( \text{HCl} \) invariably increase. (2) The proportion of lactic acid always decreases, while in later stages of digestion the acid disappears altogether from the gastric contents. The phenomenon should be attributed to the well-known antfermentative properties of \( \text{H}_2\text{O}_2 \). (3) The digestive power of the gastric juice is markedly intensified. (4) In the case of hyperacidity (as well as in another similar case in the author's private practice) the administration of the peroxide was followed by a distinct aggravation of all gastric symptoms, while in all others, including that of cancer, marked improvement was observed, the appetite improved, the epigastric pain ceased, eructations and vomitings decreased or entirely disappeared, the bowels became more regular, etc. The author further made experiments on frogs and dogs, his object being to elucidate the effects of \( \text{H}_2\text{O}_2 \) on the circulation. The results agree pretty closely with those published by Guttmann and Schwerin, the essential point being that \( \text{H}_2\text{O}_2 \) is decomposed by the blood, and hence can give rise to gaseous embolism with its consequences, such as dyspnea, dilatation of the cardiac cavities, etc. From these facts, Iakovleff concludes that injections of \( \text{H}_2\text{O}_2 \) into the circulation for therapeutical purposes, as suggested by some authors, are absolutely inadmissible.—British Medical Journal, Sept. 10, 1892.

BURNS.—Von Bardelcaben recommends for burns of the face, of moderate severity, the use of a powder made of equal parts of sub nitrate of bismuth and powdered starch.
ANTITOXINES IN TETANUS.

The medical world, having rallied from the depressing effects of the very large dose of tuberculin which it took with such gusto a year or more ago, is now asked to swallow another potion of the same order, as evidenced by the following, which we clip from the Boston Medical and Surgical Journal of the 17th instant:

The deductions which are drawn from a study of immunity in animals have given rise to the practical application of these observations to the treatment of tetanus. Tizzoni and Centanni have isolated from the serum of immunized animals the anti-tetanus principle, and Tizzoni claims a successful result in the treatment of tetanus. Schwarz records a case of cure from tetanus in the human being by the use of tetanus antitoxine. Finotti, in the surgical clinic of Nicoladoni, Innsbruck, has recorded another case of cure of tetanus after twenty-eight injections.

Fortunately tetanus is a rare disease, and if there be any thing in the alleged discovery the profession may test it without stirring up popular excitement, as was necessarily the case in dealing with that most prevalent and fatal of all diseases, tuberculosis.

It must be a superb triumph for scientific medicine if the bi-products resulting from the growth of any pathogenic microbe should be found competent to check the further proliferation of the germ, and so cure the disease engendered by it. It seems fanciful; but it is this and nothing less that the great bacteriologists Koch and Pasteur are striving to demonstrate with a zeal and a faith that are simply sublime.

The bacteriological chemist is able to isolate these toxines with ease, and it remains only for the scientific therapeutist to put them to the final test.

If the doctrine announced in the foregoing should prove to be a law in therapy, the management of zymotic diseases would be reduced to a "twist of the wrist." A hypodermic syringe with a solution of toxines for each particular disease would be all the armamentarium needed; cures, if the disease was taken in time, might be assured, and diagnosis would be the only element in the physician's work that would tax his skill. The death-knell of quackery would be sounded, and the vexed question of medical education would take care of itself. This is too much to hope for, but it is just what science is expecting to accomplish.

SURGERY OF THE TONGUE.

In a paper contributed to the American Surgical Association Dr. Dandridge comes to the following conclusions, for the condensation of which we are indebted to Drs. Burrell and Cushing of the Boston Medical and Surgical Journal:

1. Sufficient experience has been accumulated to show that the removal of cancer of the tongue prolongs life and adds to the comfort of the patient, and further affords a reasonable hope of a permanent cure.

2. All operations should be preceded by an effort to secure thorough disinfection of the mouth and teeth.

3. In the treatment of continued ulcers and sores on the tongue caustics are to be avoided, and all sources of irritation removed.

4. Persistent sores on the tongue should be freely removed by knife or scissors if they resist treatment.

5. When the disease is confined to the tongue, Whitewell's operation should be employed for its removal.

6. In this operation the advantage of preliminary ligation of the lingual artery is not definitely settled, but the weight of authority is against its necessity.

7. The advantage of leaving one half the tongue in unilateral disease must be considered undetermined, but the weight of positive experience is in its favor. In splitting the tongue into lateral halves, Baker's method of tearing through the raphe should always be employed.

8. A preliminary tracheotomy adds an unnecessary element of danger in the removal of the tongue in ordinary cases.
9. When the floor of the mouth has become involved, or the glands are enlarged, Kocher’s operation should be performed, omitting the spray and preliminary tracheotomy.

10. Removal of the glands by a separate incision, after the removal of the tongue, must be considered insufficient.

11. Volkmann’s method still rests on individual experience. Its just value can not be determined until it has been subjected to trial by a number of surgeons.

12. Thorough and complete removal should be the aim of all operation, whether for limited or extensive disease.

13. By whatever method the tongue is removed, the patient should be up and out of bed at the earliest possible moment, and should be generously fed.

**Notes and Queries.**

**Inclined Decubitus in Gynecological Operations.** — (Deutsche Medicinal Zeitung, September 12, 1892.—By Prof. Franz Schaccta, in Vienna.) The inclined decubitus consists in placing the body of the patient on an inclined plane which forms an angle of about forty-five degrees with a horizontal plane. This is the so-called Trendelenburg’s position. The pelvis is above and the head below. In order that the light may fall well into the pelvis the table is so placed that the head of the patient is directed toward the light. The working of this position consists therein that by closed abdomen all the movable contents of the abdominal cavity glide upward toward the diaphragm, the space so vacated being filled up either by the pelvic organs or by the sinking in of the abdominal walls. In this position one can often distinctly feel the bodies of the lumbar vertebrae and the promontory of the sacrum through the abdominal wall. If there are adhesions of the intestines with the pelvic organs and the intestines can not glide well up out of the pelvis, there will occur no groove just above the symphysis pubis, as ordinarily, and adhesions can be inferred. If the abdomen is now opened, the intestines are found already well pressed up against the diaphragm, and the pelvic organs present with wonderful distinctness. If the abdominal walls are very rigid and tense, air will rush in with a swishing sound, and the intestines can be observed to glide upward toward the diaphragm.

The advantages of operating with the inclined decubitus consist therein that we can see distinctly during the whole operation, which is especially important in case of hemorrhage from the depths of Douglas’ cul-de-sac. Further, one can demonstrate the position of the various pelvic organs to a great number of onlookers most beautifully, which is of great importance as far as teaching is concerned. As objection to this position is urged the danger of injury to the bladder, which glides upward like the rest of the pelvic organs, Schaccta is of opinion this danger is scarcely to be considered, especially if the bladder has been previously emptied. In one hundred and four operations in this position he found no difficulty in avoiding injury to this organ, but he holds it advisable to always empty the bladder before operation in the inclined decubitus. Another objection is the possibility of pus flowing upward into the abdominal cavity, but this can be prevented by the proper use of compresses of gauze.

Schaccta points out another danger which two cases served to make him aware of, viz, the axis-twisting of the intestine. By experimentation on the cadaver he found that the intestinal coils which were originally on the right side below glided upward to the left side. The body being again placed horizontal, the coils gradually assumed their original position. This occurred, however, only when the abdomen was left open. If the abdomen was first closed and then the body placed in the horizontal position, the coils remained high up and to the left side. Owing to these facts, he has adopted the following rules when employing this position: "The patient is placed in the inclined decubitus before the operation is begun. After the operation is completed, the deep sutures are placed in position, but not tied; the edges of the incision wound are grasped and pulled somewhat forward, and then the body is brought gradually into the horizontal plane. The head and shoulders are now slightly raised and the abdominal contents slightly agitated to facilitate their resuming their normal positions. The patient is again placed in the horizontal position and the sutures tied. Schaccta believes that in this way the changes in the positions of
the intestines can be prevented. Cases which are suitable for this position are: Tumors of the adnexa, castration in myoma, tubal pregnancy in the first few months, ventral fixation, myomata and ovarian tumors which do not extend higher up than the umbilicus.

The transcriber has seen two cases in Heidelberg operated on by Czerny in which death occurred as a consequence of the axis-twisting mentioned by Schaccta. Both of these cases, however, had been operated on in the horizontal position, the twisting having occurred as a consequence of intestinal paralysis.)

Emmet (New York Journal of Gynecology and Obstetrics) is of opinion that the inclined decubitus is by no means a cure-all, but finds it a most useful adjunct in the treatment of chronic pelvic inflammations, in the idea that the position may produce a beneficent influence on the circulation of the parts. The foot of the bed can be raised eighteen inches, the patients standing this position for weeks without discomfort. It is of no use to elevate the foot of the bed less than twelve inches.

JAMES B. BULLITT.

Prophylaxis of Childbed Fever.—(By Prof. Frommel.) Frommel reports two sets of experiments made in his clinic. From April 1, 1887, to November 15, 1890, 559 women were delivered. All of these were given a full bath on admission and provided with fresh linen. The external genitals were washed with a solution of 1–2,000 sublimate, and the vagina washed out with the same solution. Of these 559, five died in childbed: one, without fever, from an embolism of the arteria pulmonalis, the second of pneumonia, the third of carcinoma vulvae, the fourth of hemorrhage, and the fifth from puerperal infection, starting from a decubitus ulceration on the completely everted vaginal mucous membrane. This woman was admitted to the clinic already in labor and with fever. Excluding this last case, the prophylactic disinfection gave a mortality of 0 per cent. Morbidity for the same time was between 5 1/2 and 7 1/2 per cent. A rise of temperature over 38° C. was reckoned morbidity.

From November 15, 1890, to December 11, 1891, 197 women were delivered. Washing out the vagina was discontinued, but the hands and instruments were disinfected in the most thorough manner, as usual. Of these 197 three died from sepsis, the morbidity averaging 11 1/2 per cent. The author concludes that disinfection of the vagina is absolutely called for.

Hofmeier, of Wurtzburg, reports 1,900 cases of confinement occurring in his clinic between January 1, 1859, and September 21, 1891. These cases were all used to the fullest for purposes of instruction, and the following operations were undertaken: Forceps, 19 times; turning, 22; extraction, 22; perforation, 4; manual removal of placenta, 9; cesarean section, 1; artificially produced premature birth, 8; placenta previa, 4; tamponade of uterus in period following birth, 5; eclampsia, 1. In all there were 5 deaths: 1 from hemorrhage in placenta previa, 2 on the thirteenth day from interference with breathing and circulation, result of kryptoskolirosis, 1 from peritonitis, 1 from weakness after cesarean section on account of osteomalacia. While the mortality for the 1,000 cases was 0.5 per cent, that for puerperal infection was only 0.1 per cent. These figures are the more important when it is considered that these 1,000 women were examined by 1,100 to 1,150 practicants, 650 candidates for examination, 117 midwives, and 510 members of the holiday courses! From all this Hofmeier concludes that obstetrical material can be used to the fullest for purposes of instruction without prejudice to the safety of the woman, provided proper care is exercised in cleansing the hands on the one hand and the patient on the other. He washes out the vagina with sublimate 1–2,000, with gentle rubbing of the vagina and os with two fingers introduced into the vagina.—Ibid.

What is the Quickest and Best Test for Albumen and Sugar in the Urine?—(By Dr. Benno Loquer, Weisbaden.) In spite of the number of tests that are in use in practice and in the laboratory, there still occur cases in which the result is unclear and doubtful. The author wishes to call attention to a combined test for albumen and sugar which is not new, but has not become widely known. By this test one test tube of urine in one sitting can be tested
in three or four minutes for albumen and sugar, and the result can be relied upon as being absolutely accurate. The albumen test is the usual one: A test-tube is one fifth filled with filtered urine, boiled, and then one tenth of the volume of nitric acid added, not by drops, but all at once, and not again boiled. If a sedimentation occurs, albumen is present. If the urine remains clear, there is added to the same test-tube one tenth to two tenths volume; that is, ten to twenty drops of Almin’s solution, and the urine again boiled one to two minutes long. If a deep brown to black color appears, then sugar is present. If the urine contains albumen, it is filtered clear of the coagulated albumen, and the procedure continued as already described. The whole test as described can be carried out in from two to four minutes. The Almin’s solution (four grams Seignette’s salts are dissolved in one hundred parts of ten-per-cent liquor sodii, and stirred up in a water bath with two grams subnitrate of bismuth until as much as possible of the bismuth is dissolved) can be had at any druggist’s, and in colored glass is preservable for years. The test is dependent on the property of glucose to reduce bismuth in an alkaline fluid, and is hence a modification of Boetger’s test. The test shows the presence of sugar in quantities of from 0.05 to 0.1 per cent, and so is more delicate than Trommer, Heller or Fehling. Sources of error in Trommer’s test from presence of uric acid or kreatinin are avoided in this test.—Ibid.

Prevention of Mastitis.—(The American Journal of Obstetrics.—By Virginia M. Davis, M. D.) Septomatic observation was made of 750 women. Prevention of mastitis dependent on two factors: (1) prevention of wounding of the nipple, (2) prevention of stagnation of milk. The first indication is best fulfilled through cleanliness—the use of borax-water for mouth of child. It is a great mistake to attempt to harden the nipples by means of astrin- gents or mechanical devices. It is much more rational to keep the skin soft and oily, for which the following salve is well used:

Tinct. benzoic co. ............... gtt x v;  
Ol. oliva .................. 7.50 parts;  
Lanolini ....................... 22.50 “

This salve is to be used after every nursing, and thereby the troublesome fissures avoided. If these occur, however, it is all a mistake to give the breast quiet and rest; on the contrary, the nurse must still continue with the breast in spite of the pain. The erosions are best treated with nitrate of silver in the stick, or with equal parts of tinct. benzoic and glycerin. To prevent the stagnation of the milk, mild cathartics are to be employed, binding up and compression of the breast, ice, and finally emptying of the milk by soft pressure of the hand. The author keeps up this expression even after pus appears; that is, after mastitis has occurred.—Ibid.

Castration Before Marriage (Journal de Medicine de Paris.)—The courts of Birmingham have been occupied with a very curious affair. A Dr. Malins, having performed an exploratory laparotomy on a young lady, and having found nothing abnormal, closed the abdomen, leaving the ovaries in situ. The year following, still suffering, the patient addressed herself to Mr. Lawson Tait, the celebrated, who, having opened the abdomen, removed one ovary. He did not remove the other because he could not find it. The patient made complaint against Dr. Malins, accusing him of having removed an ovary without her consent, and was supported in the charge by Mr. Tait. Dr. Malins denied the accusation, saying he had removed nothing. The court was in embarrassments. If the judge had been a Solomon he would have ordered the abdomen in question slit open a third time; but he was not a Solomon, and was much perplexed. Happily in the meantime the young woman, who had married, became enceinte, much to Dr. Malins’s delight and to Mr. Tait’s discomfort. History sayeth not if Mr. Tait promised to be more reserved in the future. Ibid.

Etiology of Osteomalacia in Pregnancy.—(Deutsche Medicinal Zeitung.—By Dr. H. Eisenhart.) A pathological condition of the ovaries is to be looked upon as the causative agent in osteomalacia; there is a pathological increased activity of the ovaries, a hyperproductivity. Osteomalacia occurs sometimes very early, generally between the thirtieth and fif-
tieth year. Women with osteomalacia are predisposed to more frequent conceptions. It is a mistake to suppose that the frequent conception predisposes to osteomalacia. One hundred and five women with osteomalacia bore six hundred and seventy-three children. This is about twice the average of productivity in Germany. The blood of osteomalacious patients undergoes a certain change, according to Eisenhart's investigations, consisting, outside of a diminished capacity for carrying hemoglobin, of a diminished alkalinity. Blood so changed can act on the lime salts of the bone to produce their solution.—Ibid.

**Protection of the Perineum During Labor.**—(Dr. W. R. Rand, Medical Record, No. 40.) Two years ago author had an aged primipara to deliver. The soft parts were so rigid and the orifice of vagina so extremely narrow that he undertook to stretch the same with his fingers, pulling the os coccygis backward at the same time. This labor, trying for both patient and accoucheur, was rewarded by a delivery without more ado, the perineum being preserved intact. Since this time Rand has practiced this method regularly and always with a like good result. No orificium vaginae, says he, is so narrow that it can not be so stretched as to permit delivery without rupture of the perineum.—Ibid.

**Bernhardt's Balm.**—For a long time it has been popularly supposed that Sarah Bernhardt was possessed of some secret balm which preserved her youth, but the great actress has denied such rumors, and has claimed that it is only by rational care of herself that she has perpetuated her fresh looks. Lately, however, she has confessed to a rejuvenator from which she gets unfailing refreshment. It is a liquid in which she is bathed from head to foot—an eau sedative, Madame Bernhardt calls it. The prescription is as follows: Two ounces spirits of ammonia, two ounces spirits camphor, one and a half cups sea salt, two cups alcohol. Put all into a quart bottle and fill with boiling water. Shake before using. The method of application is very simple. She is bathed with a soft sponge dipped in the undiluted liquid, and dried with the slight friction of a smooth towel. After the bath the stiffness and soreness of fatigue is all gone; the circulation is stimulated and a gentle languor is induced, followed by a desire to sleep. Such is the meat on which our Cesar feeds. Whether other women can be kept fair and unwrinkled by such means is a question left for experiment to decide.—The Formulary.

**SPECIAL NOTICES.**

**Therapeutics of Piperazin.**—Accepting the very clear and complete clinical researches of Biesenthal, Schweningen, Ebstein, Vogt, Gautrelot, Heubach, Bardet, and other well known physicians, general practitioners have made many interesting tests of Piperazin, and have arrived at some very satisfactory conclusions concerning its value. Its chief therapeutic indication is the uric acid diathesis, or the dyscrasia resulting from that condition. It is, unquestionably, the most energetic solvent of uric acid and urate concrements which may be employed within the human organism without producing toxic effects. With uric acid it forms a neutral, soluble combination, while at the same time it dissolves the various albuminoids and their homologues. Prescribed in combination with Phenacetine it has very marked influence upon the gouty condition and promotes the absorption of undesirable exudates. The value of Piperazin in both acute and chronic gout appears to be very decided. Schweningen reports success in 92 per cent of his cases, and states that he could get no such results with any other remedy. Biesenthal also administered Piperazin in gout, in renal colic, and in urinary hemorrhage with perfect success. He gave it in carbonic acid water 1 to 500. The ordinary daily dose of Piperazin is fifteen grains. Some clinicians begin with three grains per diem, or one-grain doses t. i. d.

A great drawback in the employment of Piperazin has arisen from the fact that, while in many cases its use must be continued for a certain length of time in order to obtain its best effects, the cost of the medicament has been so high as to practically preclude its general use. It is gratifying to learn that through the enterprise of the Farbenfabriken vorm. Friedr. Bayer & Co. (whose laboratories are at Elberfeld), a new process for the preparation of Piperazin has been discovered, and through the use of that method the cost of this valuable new remedy has been reduced to about one half of its former price.

Descriptive pamphlets of this product may be obtained from W. H. Schieflolin & Co., New York, who are the agents for this well known laboratory. Other products of the Farbenfabriken, such Phenacetine, Sulfonal, Europhen, and the later product, Salophen, are now employed frequently in general practice.

I have found Peacock's Bromides in one dram doses of great service in congestive and neuralgic headaches and in the headaches accompanying menstrual derangements. I shall continue to prescribe this preparation in my practice.

William Macsweney, M. D. and M. Ch.,
Killarney, Ireland.
time errors were corrected. Little attention had been given to hygiene for many centuries. The people through superstitious belief did not regard it essential to resort to any means by which to preserve health. But now, through the advice of physicians, means were resorted to in order to prevent disease.

The longevity of man since the dark ages, through the agency of the profession, has been lengthened nearly two-fold. The other various branches of medicine also received due attention, by which great advances were made in the way of improvement. Surgery, that until now had been greatly neglected, and in fact was mainly in the hands of ignorant barbers and itinerant quacks, soon assumed its proper place in the profession, where it made rapid advancement. This was the case also as respects midwifery. This important branch of medicinal science had been buried for centuries in the hands of ignorant and superstitious midwives.

In the early part of the seventeenth century M. Mauriceau published a work on that subject which attracted great notice throughout Europe, inducing special attention to this important branch of medicine.

During the period of reformation in medicine, many theories and systems were attempted to be established. For want of space we will only designate them by name, not attempting to define their characteristics. We had the sect called Iatro-mechanics, or action of the muscles; Iatro-chemists, or animal chemistry; Iatro-mathematicians, a sect founded by Borelli, professor in the University of Pisa; the Vitalists, introduced by Stahl and Barthez, who contended that all functions of the system were governed by a vital principle. This theory became quite popular and existed many years. The theory of animism, introduced
about the same time, became popular in Germany for a short time. Then there were the solidists and humoralists.

What is termed the Brunonian theory was inaugurated by John Brown, born in Scotland. He was a pupil of the celebrated Cullen, of Edinburgh. His theory was that all diseases were of sphenic or asthenic character, but as a rule more than ninety per cent were of the asthenic class, and called for stimulants. That if you prescribed stimulants in all cases, you would not be wrong in more than three out of a hundred. This doctrine spread rapidly for a while, especially on the continent, but, like many others based on false premises, its day of popularity was of but short duration.

The next heresy or theory was inaugurated about the commencement of the present century by Samuel Hahnemann, and termed Homoeopathy, or *similia similibus curantur*. Of this theory I shall have something to say in the following pages, as it is the only one, of so many, that has any special existence at the present time. In this country, in the first quarter of the present century, a man by the name of Thomson instituted a system of treatment which went by the name of Thomsonianism. This plan consisted mainly of the application of steam externally and of lobelia internally, and what they called composition powders. The object in view was to make one sweat freely. He claimed to break up fever in a short time on this plan. It had its run for a short time, mostly in the South.

There are a few physicians through the country who claim to be Eclectics. They claim to use only the active principles of plants, which of course varies greatly from the old-time sect that went by that name. We might speak of the sect calling themselves Christian Scientists, who claim to cure patients by faith alone, but they are quite insignificant in numbers.

Samuel Hahnemann, born in Saxony, in 1755, when fifty-five years old, published his work entitled *Organon* of Medicine, on which work the whole system of homoeopathy is based. He was also the author of several other works of minor importance. The entire system of this dogma is founded on the principle that whatever symptoms a drug will produce on a well person, the same drug will relieve in a patient with a disease manifesting the same phenomena. He claimed that all his remedies had been proved, that is, tried on well persons, and the symptoms resulting correctly noted.

I will now state the manner of preparation of his remedies and his plan of practice, quoting mostly from his organ. The homeopaths use their medicines both in the form of solution or tinctures and globules or pills. These preparations vary in strength, according to their number of dilutions or attenuations, from the first to the thirtieth. These are denominated dynamization or potency. "Two drops of the fresh vegetable juice of the drug (whatever it may be) mingled with ninety-eight drops of alcohol and potentized by means of two successions, whereby the first development of power is formed; and this process is repeated through twenty-nine more phials, each of which is filled three quarters full with 99 drops of alcohol, and each succeeding phial is to be provided with one drop from the preceding phial (which has already been shaken twice), and is in its turn shaken, and in the same manner at last the 30th development of power (potentized decillionth dilution X), which is the one most generally used. All other substances adapted for medicinal use, except sulphur, which has of late years been only employed in the form of a highly diluted (X or 30th), as pure or oxidized and sulphurated metals and other minerals, petroleum, phosphorus, as also parts and juices of plants that can be only obtained in the dry state, animal substances, neutral salts, etc. All these are first to be potentized by trituration for three hours, up to the million-fold pulverulent attenuation; and of this, one grain is to be dissolved and brought to the 30th development of power by means of 27 attenuating phials, in the same manner as the vegetable juices." (*Organon*, p. 315.) Globules are prepared as follows: "Globules of sugar of milk, or of common sugar, or sugar and starch, of the size of poppy seeds are made and moistened with the dilution or attenuation, as the 3d, 6th, 8th, 9th, 10th, 30th, or whatever may be employed. To impregnate the globules with the appropriate
dilution, the globules are touched by the moist-
ened stopper of the phial containing the dilu-
ton itself, and are themselves subsequently
laid aside dry in stoppered phials, and thus
kept dry for future use." (Work on Chronic
Diseases.) In the same work, he orders the
30th attenuation of the drug to be effected in
a porcelain mortar, by means of six triturations
of six minutes each, and six scrappings of
four minutes each. He warns his disciples
to be careful not to shake the vials more than
twice, lest it becomes too strong, or, as he terms
it, too highly potentized. He says homeopathic
medicine becomes potentized at every division
and diminution by trituration or succession.
He also avers that the simple shaking of fluid
medicines by carrying them about in the pocket
greatly potentizes them, and consequently warns
his followers of such danger in their "practice."
(Organon, 316.) He also claims that liquid
medicines do not become by their greater
attenuation weaker in power, but always
more potent and penetrating. In his "Les-
sor Works," he explains how a medicated
globule imparts its powers to unmedicated
globules, which is by shaking 1 with 13,500
five minutes, when they become impregnated
with the same drug potency the original one
possessed, and that the one retains its original
power. This one, however, must be of high
potency. He claims that the higher the dilu-
tion of any drug the stronger it becomes, and
explained it by affirming that infinitesimal
division produces a real spiritualization of the
drug. He also claims that the greater the quan-
tity of liquid in which a dose of medicine is
dissolved when exhibited, the greater is its
potency or effect. For example, he says "that
common salt (natorium muriaticum) when
carried to the 30th dilution becomes a power-
ful and heroical remedy, which can only be
administered to patients with the greatest cau-
tion." He maintains that even insoluble sub-
stances, as gold, platinum, charcoal, etc., when
triturated with sugar and prepared in the man-
er directed become medicinal in infinitesimal
doses, though they were in no degree medi-
cinal in larger quantities and in their original
form. He forbids the exhibition of more than
one drug at a time. If more than one is given
they might obstruct or alter each other's action
on the human body.

According to Jahr's Materia Medica, "silex
or flint is usually employed in the 30th dilu-
tion, and the duration of its effects or symp-
toms is from seven to eight weeks." He says
doses of flint produce 372 different symptoms.
He classes 23 under general symptoms and 17
under moral symptoms; the others are divided
up between different parts of the body, each
part receiving its proportionate share. Of all
these symptoms we will only name the moral
ones: "Melancholy and disposition to weep;
nostalgia; anxiety and agitation; taciturnity;
inquietude and ill humor; scruples of con-
science; easily frightened; discouragement, ill
humor, and despair; obstinacy and great irri-
tability; repugnance to labor; apathy; weak-
ness of memory; incapacity for reflection;
great distraction; tendency to misapply words
when speaking; the patient thinks only of pins,
fears them, searches for them, and counts them
carefully."

These are wonderful effects to be produced
by a decillionth grain of silex. Everybody
takes more than that daily with his food, but
it has not been potentized.

Hahnemann warns his disciples not to use
flint in large doses for fear of producing violent
effects; that it is the safest to use the decillionth
dilution. "It holds good," he says, "and will
continue to hold good as a homeopathic ther-
apeutic maxim, that the best dose of the prop-
erly selected remedy is always the very small-
est one in one of the high dynamizations (X
or the 30th dilution) as well for chronic as for
acute diseases." (Organon, p. 289.) If we ex-
press the quantity arithmetically, it amounts to
1,000,000,000,000,000,000,000,000,000,000,
000,000,000,000,000,000,000,000,000,000,000
of a

It is somewhat puzzling to the human intellect to accurately estimate the ac-
tual quantity contained in one dose of this high
potentized medicine. To give you some idea of
this infinitesimal matter, it is estimated that
if each individual of the present population of
the globe, 1,400,000,000, had existed at the
time of Adam and still continued to exist, and
had begun to swallow, and continued to swal-
low hourly day and night without cessation,
a decillionth dose of a grain of sulphur, or any drug as recommended by Hahnemann to cure disease, that at the present time the quantity taken could scarcely be missed out of this tremendous bulk, and it would require millions of years to finish the job.

And yet we are told that two or three doses of this 30th dilution will cure any case of disease, acute or chronic. It would require an expert mathematician to demonstrate by calculation the quantity of medicine contained in one dose of the 30th dilution. If the globe on which we live could be converted into sugar of milk it would not afford sufficient material to dilute one grain of the original medicine, say sulphur, silex, or oyster shell. But when we come to calculate the still higher attenuations some claim to use, say as high as the 200th dilution, we are lost in ideality. "In 1831 Korsakoff published an account of a 1,500th dilution of sulphur, and proclaimed its therapeutic efficacy." Some prominent men used the higher attenuations, as high as 2,000th, and arsenic was reduced to the 4,000th dilution.

"Dr. Nune, of Madrid, in 1846 detailed several cases in confirmation of the virtue of the high dilutions: 1st, that in certain exceptional cases we may use dilutions below the 2,000th; 2d, that the most suitable dilution for acute diseases are those above the 2,000th; 3d, that in most chronic complaints it is preferable to employ still higher dilutions; 4th, in chronic diseases, with organic lesions, the 2,000th dilution almost always produces aggravation. In these, therefore, we should ascend much higher than the 2,000th."

In 1851 the doctor read a paper at Paris in which he reported a case of consumption cured by the 6,000th dilution of sulphur, and also of some cases of disease cured by equally high dilutions of arsenic and mercury.

Dr. Gross and others also published cases in advocacy of the virtues of the higher dilutions. He used 200th to the 1,500th.

Mr. Neuman was of the opinion that homeopathic medicines properly prepared would cure all diseases. He used all dilutions from the 1st to the 8,000th. "According to these printed records of cases and observations, cures by the same drug are effected, and, if we may believe these records, with equal speed and success by some practitioners when using it in the 1st and 3d dilution; by others when using it in the 30th dilution; and by others, again, when using it in 100th or 1,000th or 6,000th dilution."

Dr. Wood remarks that the whole thing is an absurdity so gross that language fails to express it. But Arnaud long ago observed that there are no absurdities too groundless to find supporters. Who ever determines to deceive the world may be sure of finding people who are willing enough to be deceived, and the most absurd follies always find minds to which they are adapted. Hahnemann in the latter part of his life came to the conclusion that it was preferable, or at least "equally as good," to use his preparations by olfaction as it was by mouth.

In 1833 he observes: "All that homeopathy is at all capable of curing among excessively chronic diseases that have not been quite ruined by allopathy, as also among acute diseases, will be most safely and certainly cured by the mode of olfaction. I can scarcely," he adds, "name one in a hundred out of the many patients who have sought the advice of myself and assistant during the past year, whose chronic or acute disease we have not treated with the most happy results, solely by the means of olfaction. During the latter half of this year, however, I have become convinced of what I never could previously believe, that by this mode of olfaction the power of the medicine is exercised upon the patient in at least the same degree of strength, and that more quickly, and yet as long as when the dose of medicine is taken by the mouth, and that consequently the intervals at which the olfaction should be repeated should not be shorter than ingestion of the material dose by the mouth." (Organon, p. 332.)

"Dr. Gross, who used medicines of high potency, often could see a cure start while allowing the patient to smell the remedy, and often waited four weeks or so for the completion of the cure, not even permitting a second smell or dose, so mild yet so certain is the remedial action."

Hahnemann observes: "A globule, of which ten, twenty, or a hundred weigh a grain, impregnated with the 30th dilution, and when dried, retains for the purpose of olfaction all
its powers undiminished for at least 18 or 20 years, even though the phial be opened a thousand times during that period, if it be protected from the heat and the sun's light.” (Organon, p. 332.)

“Dr. Croziero, in his notes after the death of Hahnemann, speaks of his practice by olfaction, and attests his success in this way. My own wife, says Dr. C., was cured by him in this manner of a violent pleurisy in the course of five hours. In chronic cases, happen what might, he never allowed this olfaction to be repeated oftener than once a week. And he gave besides, for internal use, nothing but plain sugar of milk. In this manner he effected the most marvelous cures, even in cases in which the rest of us had been able to do nothing.” According to Hahnemann, even the olfaction of substances which have no smell may produce immediately direct and decided therapeutic effects. “If,” says he, “a grain of gold leaf be triturated strongly for an hour in a porcelain mortar with one hundred grains of sugar of milk, and this diluted to the quintillionth attenuation, it will possess a more penetrating medicinal power than any of the other dilutions. A single grain of this dilution put into a small clean phial will restore a morbidly desponding individual, with a constant inclination to commit suicide, in less than an hour to a peaceful state of the mind, to love of life, to happiness, and horror of his contemplated act, if he performs but a single olfaction in the phial, or put on his tongue a quantity of this powder no bigger than a grain of sand.” (Lesser Writings, p. 821.) Of course, our credulity must be quite expansive to take all this in, especially when we contemplate that it would require a lump of sugar of milk several times the size of our globe to reduce a grain of gold to the quintillionth attenuation, and at the same time consider the fact that gold gives off no odor. It is remarkable how quick olfaction cures. He relates a case of dyspepsia with all its concomitants which he cured in two hours by one olfaction of pulsatilla of the 30th dilution.

In treating disease he lays it down as one of his indubitable truths that the “sum of all the symptoms in each individual case of disease must be the sole indication, the sole guide to direct us in the choice of a curative remedy.” (Organon, p. 120.) By the removal of the whole of the perceptible signs and symptoms of the disease, the sum total of the disease is at the same time removed.

“Medicines,” says Hahnemann, “on which depend man's life and death, disease and health, must be thoroughly and most carefully distinguished from one another, and for this purpose tested by careful experiment for the purpose of ascertaining their powers and real effects on the healthy body. On these experiments, or provings, depend the exactitude of the whole medical art, and the weal of all future generations of mankind.” (Organon, p. 215.)

These proved symptoms, then, of the particular drugs form the grand and invaluable data by which the homeopathic practitioner judges of the applicability of his drugs to the removal of the special disease, or rather symptoms of disease, which he undertakes to cure, and this constitutes the data by which he attempts to select the proper remedy from his medicine-box. It is wonderful how many symptoms some simple substances can produce on a person in health. As a sample we will quote one or two of them. Common salt (natrium muriaticum) can produce over 450 symptoms, and of course can cure any disease with such symptoms. According to Jahr, house salt is usually given in doses of quadrillionth or decillionth of a grain. We will only quote the names of a few of the symptoms produced by it, as it would require several pages to enumerate the whole list. They are: tendency to dislocations and to strain the back; paralysis; great drowsiness during the day; frightful dreams of quarrels, murders, fires, thieves, etc.; typhus fever; headache, colic, vertigo; sensation of hair on the tongue; drawing, like extracting teeth; spasm of the throat; excessive amative feelings; natural pains in the back, digging in the arms, difficulty in bending the joints of fingers, burning in the feet, redness of great toe, corns on feet, etc. It is stated that the effects of a single dose will last forty or fifty days. It is strange how we manage to live, enduring all these symptoms with over four hundred others, which we ought to have all our lives, as we
take daily a million times more salt than a dose here alluded to. But it may be we have these symptoms without being cognizant of the fact, as the whole thing must depend on the imagination. Another sample is chalk. We can only name a few of the thousand symptoms it is said to be capable of producing: Strong desire to be magnetized; emaciation; great plumpness and excessive obesity; monthly suppurative tumors; distortion of bones; snoring, horrible dreams; asthma, headache, toothache; quotidian and tertian fever; fear of death; aversion to labor; delirium; icy coldness in head; immense size of the head; dilated pupils, polypus in the ears, wetting the bed, polypus of the bladder; prolapsus uteri; ulceration of nipples and larynx; stiff neck; warts on hands and arms, etc.

Is it not astonishing that we can, as a rule, enjoy fairly good health and attend to business with all these symptoms and diseases, with nearly one thousand more, resulting from the use of carbonate of lime? Of course we take a hundred-fold every day in the water we drink and food we eat more than the dose that produces a thousand symptoms of disease; but it must be similar to that of salt. We pass along through life ignorant of the great number of symptoms and diseases with which we are afflicted.

In this way Jahr continues to give in his Materia Medica, the symptoms resulting from the proving of over two hundred different drugs. Now, of course, when the doctor is called in he must closely scrutinize all the conditions of his patient, noticing all the symptoms before he can guess at the proper remedy for his relief. Chalk, according to this author, is competent to master the thousand symptoms it produces by its provings, and in a case of disease with symptoms similar to those produced by chalk, one would suppose it required a long time for the doctor to study the case so as to give a correct diagnosis. According to Hahnemann, a correct diagnosis and the application of the proper remedy, whether of salt, sulphur, oyster shell, or charcoal, is of the utmost importance.

To prevent ridicule of the pretentious effects of high potently remedies, especially of inert substances, Hahnemann claimed that they acquired spirituality by the mode of preparation. He says the homeopathic system of medicine develops for its use to an unheard of degree the spiritual medicinal power of the crude substances by means of a process peculiar to it. (Organon, p. 315.) Again, he says "that this spiritual power of drugs capable of altering man's health, and hence of curing diseases, which lies hid in the inner nature of medicines, is not of itself discoverable by us in any way by the mere effort of reasoning." (Page 121.) "The homeopathic remedies," says Broacke, "are merely stripped of their bodies of their matter, that the spirit only may by employed." Dr. Mure says "that all substances in nature, even those regarded as most inert, possess the power of acting on the vital dynamism, because all contain a spiritual principle which they derive from God." This may explain to great extent why so many during the first half of the present century came to be homeopathists.

[To be continued.]

PNEUMONIA.

BY E. S. M'Kee, M. D.

Pneumonia is considered by Mosny 1 an acute specific inflammation of the bronchioles and lobules on which it depends. He believes the broncho-pneumonia epidemic and contagious, and that it should be prevented by isolation and the practice of antisepsis.

Sturges and Coupland 2 in their work relate their experience as leading them to the belief that, while no distinction whatever can be made as between the left side and the right, apex pneumonia is not so fatal as base; and further, that it does not, as is often supposed, subject the patient to the risk of tubercular phthisis.

The causal relation of atmospheric temperature is considered by Baker 3 to be fully established, after his elaborate study of over two


[When not otherwise mentioned references are dated 1891.]


hundred thousand cases. He believes it a general law applicable throughout the world.

The pathological anatomy of the blood in croupous pneumonia is described by Kikodse. He found that the relation and absolute quantity of white blood corpuscles increases two or three times. In severe cases, which result fatally, this increase is not observed. The increase of white blood corpuscles takes place at the expense of an increased amount of overripe elements. This change in the blood occurs sooner than the changes in the lungs, and continues without observable decrease until the crisis. Generally the increase of the number of white blood corpuscles and of effete matter keeps pace with the temperature. With the temperature crisis there is also a crisis in the blood. The amount of the effete matter and the white blood corpuscles becomes rapidly normal or subnormal.

The blood in pneumonia has been the subject of some interesting observations by Kikodse. He found the white blood corpuscles increase in number to as much as double or treble the normal amount. In fatal or very severe cases no increase was found; as a rule, however, the increase begins even before the physical signs of pneumonia are detected. It persists from that time on to the crisis with little variation; after the crisis it suddenly falls. It appears to be due to the re-entering into the circulation of the corpuscles which have passed out into the alveolar spaces, hence probably the preponderance of overmature corpuscles; after the crisis this preponderance ceases. The increase, when observed, is found in the fully mature and overmature corpuscles rather than in the young ones.

The microbes of pneumonia have been studied by Banti. He found the diplococcus lanceolatus present in every one of forty-seven cases of fibrinous pneumonia. The main point in his researches seemed to be the well-nigh invariable presence of the diplococcus lanceolatus in lobar pneumonia, not only in the exudation in the lung and pleura, but often and probably always in the blood also; and that variations in intensity of the disease depend on differences in the virulence of the microbes; and that complications are as a rule excited by the same agency.

Suppurations produced by the pneumococcus of Fraenkel in the hands of Nannoth lead to the following observations: An abscess in the left submaxillary region, one in the mastoid region with partial necrosis of the mastoid apophysis, a peridental abscess, a perineal abscess in a subject probably tubercular.

Buccal infection in broncho-pneumonia has been studied by Mery and Bolch. Bacterial examination of the saliva in 48 consecutive cases of measles in children found the pneumococcus lanceolatus of Fraenkel in 14 cases, and the streptococcus pyogenes in 11 cases, one of the microbes being present in 52 per cent. Observations of the saliva of 20 children suffering from chronic diseases, or acute disease other than respiratory, showed that one or the other of these microbes was present in 15 per cent only. The practical point, as brought out, that secondary bronchial and pulmonary affections of measles occur with few if any exceptions only when the saliva contains the pneumococcus or the streptococcus. They observe as a corollary that it is desirable to give minute attention to rendering the mouth aseptic during measles.

Systemic infection in secondary pneumonia has been investigated by Haushalter, who inoculated nutrient gelatine with blood obtained from the finger. In all three cases which he tried he obtained cultivations of the staphylococcus pyogenes aureus. He considered this microbe probably secondary to the pneumonia. He found that cultivations of the staphylococcus injected into the trachea of rabbits were capable of producing lobular pneumonia. He would explain by this systemic infection the occasional occurrence in the secondary pneumonias of whooping cough, measles, and other acute infectious diseases, of tumefaction of the spleen, acute nephritis, endocarditis, and arhythmia.

The diplococcus pneumonia occurring in the
milk of a woman affected with pneumonia is described by Bozolzo. A woman nursing a child five months old was attacked by a pneumonia crouposa sinistra, which later extended to the right lung, was followed by endocarditis, and ended in lysis. Cultures of milk pressed from the breast on the fifth day of the disease gave rich developments of pneumococci.

Immunity against pneumonia pneumococcus and the best manner in which to produce it was the subject of researches by G. and F. Klemperer. Their experiments, which were confined to rabbits, revealed that every nutrient medium in which the pneumococcus has been cultivated will, if inoculated, render an animal immune against pneumonic septicemia even after the cocci have been removed by filtration. The power of producing immunity is more speedily acquired if the infected nutrient medium is exposed to a temperature of 41° and 42° C. for two or three days, or of 60° for an hour or two. An interval of from three to fourteen days was necessary between the inoculation and the production of the immunity. Hence the injection could not cure or prevent if given simultaneously with the outbreak of the disease. However, serum taken from the blood of animals enjoying immunity was found, when introduced into the circulation, able to cure pneumonic septicemia. The serum was injected twenty-four hours after infection, while the animal had a temperature of between 105° and 106.5° F. Eight cubic centimeters were injected, with the result that the temperature gradually sank during the next twenty-four hours. In twelve successive cases a successful result was obtained. These experiments have been confirmed by Foa and Carbonne.

The prevention of pneumonia has been carefully studied by Foa, who has made further researches concerning the immunity obtained against pneumonia by injecting an attenuated culture of the diplococcus of pneumonia. Foa has obtained by means of sulphate of ammonia a precipitate from the culture in broth. This being repeatedly filtered, a substance is obtained which, being introduced for three or four days into the blood of rabbits, so modifies the constitution of the animal that it can not be infected with the diplococcus. He has also made an extract from the muscle and viseera of a rabbit dead through the injection of pneumonia. This extract was filtered and precipitated with sulphate of ammonia, and then dialyzed and dried. This substance introduced into the veins of a rabbit rendered it proof against infection of the diplococcus, which, if prepared from a healthy rabbit in the same manner, did not prove preventive.

Experiments concerning immunity have been extensively made by Emmerich and Toowitzky. Emmerich claims that an outbreak of pneumonia may be prevented by protective injections, and the disease if once established may be cured by the same means. The immunity or cure is to be obtained by the injections of blood or juice from the tissues of the immunized animal. Kerzog, who has studied the experiments of Emmerich, and observed his results, considers them very favorable, and that they seem to warrant the belief that the juice of the immunized rabbits, as prepared by Emmerich, will confer immunity, and is also possessed of curative powers. Numerous experiments on rabbits are mentioned by the last writer.

A peculiar case of pneumonia is described by Collins, which he is inclined to think is one of infective pneumonia, which he might describe as erysipelas of the pharynx extending down the bronchial tract to the lung.

Gangrene as a sequence of pneumonia is reported by Syers as occurring in a boy, resulting in recovery. A very puzzling case of pneumonia, with an excessive amount of dry pleurisy, is reported by Holt. It is claimed by Berthier that there is a form of pneumonia

"Gazetta Medica di Torino, January 3; Wiener Med. Woehenschrift, February 21; Bruxelles Journal de Medicine, March."

\[16\] Gazette Medica di Torino, January 3; Wiener Med. Woehenschrift, August 15; Centralblatt für Allgemeine Pathologie und Anatomie, No. 3.

\[17\] Berliner Klinische Woehenschrift, August 24 and 31; The Therapeutie Gazette, November; Edinburgh Medical Journal; La Medecine Moderne, October 8; Munchener Med. Woehenschrift.

\[18\] La Semanire Medecale, October 26; Tr. 1th Italian Congress Internat. Medicine, October 19 and 21.

\[19\] Gazette Medica di Torino, January 3; Wiener Med. Woehenschrift, August 15; London Medical Recorder, February 20, 1891.

\[20\] Archives für Hygiene, Vol. XII, Seventh International Congress of Hygiene and Demography, Lancet Clinic, September 3.

\[21\] Union Medecale, October 15; Il Morgagni, August 29.

\[22\] Lancet, July 18.

\[23\] Medical and Surgical Reporter, July 21.

\[24\] British Medical Journal Supplement, May 16; Revue de Medicine, April.

\[25\] Turin, Lancet, January 18; Policlinics, XVIII, 1890; Gazette Medica di Torino, London Medical Recorder, February 20, 1891.
which gives the signs of pleural effusion, which has been termed "pneumonia mas-sive."

A case of purulent arthritis following pneumonia is reported by Picque and Veitlen. The arthritis occurred on the fourth day of the pneumonia, and was situated in the right knee. The pus was examined under the microscope, submitted to various methods of culture, and inoculated into animals. It proved to be real pneumonic arthritis already described.

Acute transitory edema of the lung just at the commencement of the pneumatic crisis is reported by Kahane. The remarkable part was the sudden onset in cases where the heart's action had become so greatly depressed just at the moment when the great change of crisis had begun.

Phlegmasia alba dolens is reported by Mya. Autopsy showed in the femoral veins of the right leg below the crural arch a large thrombus, pus-like, firmly adherent to the wall. It consisted of numerous red globules and leucocytes and partly of fibrine. Bacteriological examination showed encapsuled diplococci. An injection made in a rabbit with an emulsion of this thrombus caused death by septicemia. Cultures of this animal gave colonies of diplococci. Another patient had phlegma-in alba dolens in the left leg in the course of pneumonia.

Acute pneumonia followed by chronic pulmonary tuberculosis is reported by Hanot. The author says that before the application of bacteriological research to clinical investigation this case would have been interpreted as acute pneumonic phthisis, that the eneasing pneumonia had passed into subacute condition to end in chronic tuberculosis. The examination of the sputum showed the pneumonia to be due to the pneumococcus, and that the tuberculosis evolution took place secondarily in the pulmonary tissue modified by the previous infection. A man, aged twenty-one, presented the signs of acute pneumonia of the right apex. About the fourth day there were abundant pneumococci in the sputum, but no tubercle bacilli. The physical signs never cleared up entirely, and about three weeks later tubercle bacilli were found in the sputum. In two weeks' time the physical signs were much the same; the patient's condition had improved, but there were still many tubercle bacilli in the expectoration.

The prognosis of pneumonia is ably discussed by Drummond, who thinks it would be a great gain if we could recognize approaching danger some time before the end is upon us, and thus diminish the number of so-called sudden and unexpected deaths in pneumonia, and so lessen the reproach that prognosis is one of the weakest points of our art. The weak, elderly, and the drunkard must be diagnosed with extreme care, for assuredly no general rule founded on shattered constitutions will apply. The same may be said of the subjects of bronchitis and emphysema. In the author's opinion dullness on percussion with tubular breathing is to be regarded as unfavorable when it occurs very early in the disease. A total absence of expectoration is both rare and significant, and on the other hand a large quantity of frothy bronchial secretion is to be regarded with suspicion. A continued high temperature of 104° F. from the first is suspicious, and if it reaches 105° on two consecutive days without material decline it is highly dangerous. Marked acceleration in respiration is no doubt a symptom of danger, and in the adult the outlook is serious when a rate of 50 is maintained. A good steady pulse of 100 or 110 may mean nothing on the third or fourth day, whereas on the seventh or eighth it seldom fails to indicate recovery. On the other hand, a rising pulse at this time is a warning not to be mistaken, while the same phenomenon on the third or fourth day may have no real significance. A steadily increasing rapidity of the pulse-rate during the sixth, seventh, or ninth days almost invariably ushers in unfavorable symptoms. A constantly extending area of dullness after the sixth day is decidedly ominous. Delirium is unfavorable in the main, and especially so if constant through the day and night and occurs early in the course of the attack, say on the third day. The pupils are often affected in cases.
of an unfavorable bias. They may be contracted, a condition often associated with cyanosis, a small, rapid, and empty pulse, or they may be dilated and sluggish, when the delirium is generally noisy and irrepressible with much excitement. As the end approaches there is not unfrequently rigidity of the limbs, which seldom lasts long, and may be associated with spasm of the abdominal muscles and involuntary fecal discharges.

An analysis of ten thousand cases of pneumonia treated in the London Hospital is the subject of an exhaustive paper by Fenwick. He found that the quantity of albumen in the urine is of considerable prognostic value, and those cases which commence with a severe gastro intestinal attack are twice as liable to end fatally as those which exhibit the more usual initial rigor. The mortality of the disease was shown to be directly proportionate to the severity of the symptomatic fever, and it is but natural to conclude that the presence of the high temperature tends to destroy the activity of some vital organ.

That the heart is the danger point in pneumonia all are agreed, but as to the mechanism of this danger all do not think the same. Dessau reviews the subject quite fully. As a means of dilating the cutaneous blood-vessels and producing diaphoresis Dessau suggests spirits of nitrous ether, Dover's powder or spiritus mindererus; also the warm bath, 95°. For sponging 116° F. are recommended. Conjointly friction of the skin may be employed. He advises, as a further means of relieving the right heart, the diversion of venous blood into the liver, a reservoir capable of holding a great quantity of this fluid. It is also suggested that an increase of blood to the liver will increase its functions, among which is the destruction of the poisonous principles of the blood. With this in view he suggests the use of calomel, aconite, and veratrum viride.

In the heart failure, so often the cause of death in pneumonia, Thomas recommends 1/3 grain strychnia hypodermically every six hours. He believes it possible that strychnia acts directly on the muscles of the right side of the heart, and in the same manner as digitalis. A tolerance of the drug appears to exist in pneumonia, and the dose must be large and frequent to secure decided results.

The treatment of pneumonia by large doses of digitalis has an ardent advocate in Petrosco. The doses are simply enormous. He does not hesitate to give as much as 180 grains of the digitalis leaves in twenty-four hours. He prefers the infusion made with 4 parts of the digitalis leaves in 200 of water, adding 40 parts syrup of orange peel, the dose being a tablespoonful every half hour. He states that the dose is in general very well borne, and that he has never met with a single case of poisoning. He states that he has used the leaves obtained from all the best pharmacists in Europe with uniform results. It has its antiphlogistic action only in doses of 75-150 grains per diem, which can be continued two to four days according to the severity of the case. A decided and lasting diminution in the pulse-rate is the result of these doses.

Fikel has reported very brilliant results from the use of large doses of digitalis. Hershey gives a hot infusion of digitalis in tablespoonful doses every hour, together with 10 grains of calomel at the beginning. The hot infusion acts quickly upon the cardiac muscle, forces the blood through the affected area, and thus to a marked degree overcomes the dyscrasia, and this is probably the rationale of the action of the drug. The use of large doses of calomel by reducing the consistency of the blood takes the place of the old-time method of bleeding. Drugs intended to act quickly upon the circulation are more rapidly diffused if given hot. Favorable results with large doses of digitalis have been obtained in infants by Murphy.

Chloral and digitalis are always given by Balfour. The dose must vary with the age of the patient. Adults, 20 grains chloral dissolved in a half-ounce infusion of digitalis, and subsequently half of this dose every hour until

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26 Therapeutic Gazette, February; Therapeutische Monatsschrift, February; Centralblatt für die Gesammte Therapie, May; Deutsche Medicinal Zeitung; Times and Register, August 15; Lancet, April 16.
27 Wiener Medizische Wochenschrift, June 13 and 20.
28 Medical News, August 1.
29 Lancet-Clinic, June 13.
30 Edinburgh Medical Journal, November.
the temperature falls to normal, then give some approximate tonic.

The blood serum of immune animals as a curative agent in pneumatic septicemia has been studied by G. and F. Klemperer. They found that the pneumococcus when introduced into the body of an animal generates a poisonous substance which can be isolated and to which the name pneumotoxin has been given. This sets up a febrile condition which lasts several days, after which another substance is found to have been produced called anti-pneumotoxin, and it is by means of this substance that it cures an attack of pneumatic septicemia in other animals. Pneumonia in man and in rabbits is produced by the pneumococcus, but the human body is much less susceptible than the rabbit. It was found that the serum taken from pneumatic patients after the crisis could cure pneumonia in rabbits; moreover pneumotoxin and anti-pneumotoxin were found to be pre-cut in human serum as in that taken from these rabbits. The crisis of pneumonia according to the authors takes place as soon as anti-pneumotoxin is produced in sufficient quantities to neutralize the pneumotoxin. Some attempts have been made to cure patients suffering from pneumonia with the help of anti-pneumotoxin, but further observations are necessary before results can be published.

Calomel, in the opinion of Smakovsky, is capable of jugulating or aborting fibrinous pneumonia. This therapeutic effect is not due to a direct action of the calomel on the pulmonary lesions, but to a general antiseptic action of the medicine which destroys the toxic matter circulating through the blood, and thus aids the resistance of the organism against the local morbid growth process. He employed the remedy after the method of Zacharme. In the two cases reported he gave 5 to 6 centigrams of calomel per hour till the purgative effect was reached. In one patient this effect was obtained after the fifth, in the other the eleventh dose. In both cases this was followed by a lowering of the temperature and diminution of all the other morbid symptoms. This amelioration of the symptoms was transformed directly into a crisis, without symptoms of collapse, and rapid recovery of the patient.

Smith advocates blisters in the first stage, and believes they act as suggested by Lauder Brunton, \(^\text{35}\) as a form of endemic administration of proteid matters altered in their passage from the vessels to the surface of the skin. He thinks this proteid matter exercises a destructive action on the microbe of pneumonia, and consequently cuts short the attack.

The pneumonia of infants should be treated, according to Hirst, \(^\text{37}\) with stimulation, general, respiratory, and cardiac, and the relief of internal congestion; ammonium carbonate, brandy, and digitalis are the staples of medical treatment, the last being particularly important, and food is a very necessary aid. To relieve the congestion, place a cotton jacket over the chest and give mustard baths. Acetanilide has proven beneficial in the hands of Newhill, \(^\text{38}\) who gave it to children in one-grain doses every two or three hours, and thus secured prompt reduction of the temperature, moisture of the skin, and the patient quieted.

The treatment of pneumonia in diabetes by Merklin. \(^\text{39}\) This author regards pneumonia as one of the most dangerous complications of diabetes. It appears in this disease without any initial chill, pains or dyspnea. He administered caffeine, one gram per day, hypodermically as a diuretic and heart tonic; two or three quarts of milk daily, and one and a half grams of sulphate of quinine, together with revulsion to the chest.

Exposure to the air is recommended by Coupland. \(^\text{40}\) He thinks the pneumatic patient should be lightly covered or exposed to the air beneath a cradle covered by a sheet. The application of cold in the form of compresses or baths is of much value in his opinion.

Delirium in pneumonia is the subject treated by Robert. \(^\text{41}\) He considers it one of the most interesting symptoms in pneumonia. When this condition is due to hyperemia of the brain he treats it by ice to the head. Bromide of potassium or sodium, chloral hydrate or paral-

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\(^{32}\) La Semaine Médicale, September 16; Medicina, August 23, 1891.

\(^{33}\) Semaine Médicale, p. 18.

\(^{34}\) Lancet-Clinic, November 14; Revista de Ciencias Médicas de Barcelona.

\(^{35}\) Lancet, August 29.

\(^{36}\) Practitioner, March, 1870.

\(^{37}\) Annuals of Gynecology and Pediatry, December, 1890.

\(^{38}\) Virginia Medical Monthly, May.

\(^{39}\) Gazetta degli Ospidale, No. 56; Lancet-Clinic, Oct. 31.

\(^{40}\) British Medical Journal, September 25.
dehyde, and aconite. If necessary resort to the abstraction of blood, applying leeches behind the ears. When instead of hyperemia there is congestion, it is necessary to employ some means to diminish the stasis so as to remove venous pressure. When delirium is of an anemic origin all remedies of neurasthenic action find place. Opium takes the lead with sulfnal and chloral hydrate, unless contraindicated by feebleness of the cardiae action. In delirium, the result of infection, use the same hypnotics in association with salts of quinine, carboIie acid, creosote, etc.

CINCINNATI, O.

Societies.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, November 4, 1892, Dr. F. C. Simpson, President, in the chair.

Dr. C. W. Kelly: Doubtless many of you have seen this patient, Thomas Walsh. He has been in the City Hospital during the past year. He was first in the surgical ward under the care of Drs. Yandell and Rodman. After examining him he was sent to the medical ward, and came under my care. I examined him and found obstruction to the flow of blood through the superior vena cava, the obstruction being located near the vena immuminate, the heart being free from disease; the veins in the neck, face, and arms were much distended, and on the least exertion the face and ears would turn purplish black. I lost sight of this man for three months, at which time on making an examination I found the veins on the side of the trunk very large, the long thoraeic and deep, epigastric veins being fully the size of the index finger, the right being larger than the left. It was found that the current of blood was flowing from the head, neck, arms, and trunk through these channels down to the inferior vena cava by iliac veins; this could be very easily proven. A case like this I have never seen before. This man received an injury about a year ago, caused by the fall of a telephone pole upon his head. However, I see no connection between the injury and his present trouble. He has suffered from an attack of pleurisy, affecting the left side. I suspect the obstruction has resulted from an inflammation, either of pleura or of tissues near the superior vena cava.

Dr. W. L. Rodman: I would say that when this man came to the hospital, a year ago last September, he was sent to the surgical ward; I was visiting surgeon at the time. After making a very careful examination, and from the history of the case, I reached the conclusion that the blow on his head could not have had any thing to do with the trouble, and referred him to the medical ward.

Dr. F. C. Wilson: The practical question is, what can be done, or whether any thing can be done for him. The case seems to be progressing. I recollect seeing the patient over a year ago, and there has been considerable increase in the distressing symptoms since that time. The trouble seems to be gradually increasing, and I would like to inquire, what has been done, and what the prospect is for doing any thing for him. If the trouble is due to some inflammatory deposit, then an effort should be made to absorb this; possibly iodide of potassium or bichloride of mercury would be of benefit, as these agents are known to produce good effects upon inflammatory exudates. I do not know whether any methods of this kind have been tried or not.

Dr. C. W. Kelly: Concerning the suggestion made by Dr. Wilson, this man was given iodide of potassium and the mercurial agents in large doses continued for six months without apparent benefit. I think nature is doing more for him than any thing else could possible do; his only hope of long life evidently is through the enlargement of these channels that are being opened up.

Dr. W. L. Rodman exhibited pathological specimens: This specimen is the stomach and esophagus removed from a man at the post-mortem examination. The history of the case is about as follows: German, forty seven years of age; I found him in the surgical ward at the City Hospital when I went on duty about two months ago. He gave an uncertain history of syphilis to some of the physicians, but from what he told me I think he had an attack of gonorrhea. He said he had a discharge from
the urethra some ten or fifteen years ago. For eight months prior to the time I saw him he had marked symptoms of stricture of the esophagus. His esophagus was carefully examined and the stricture located just below the thyroid cartilage. At the time I saw him he was unable to swallow even a drop of water; he had taken no food for two or three weeks; he was suffering the pangs of hunger; was going down hill all the time, and we commenced giving him enemata of milk and brandy. He improved very much for two or three weeks, really gaining a little flesh, and said that the enemata we gave him daily relieved his hunger and he was made far more comfortable by them. As he was doing so well we thought we would hold him until we moved into the new hospital, then we intended to do a gastrostomy. As I said, he was improving on the rectal feeding, and for two or three weeks gained flesh, was able to be out of bed, and worked around the hospital. I was very much surprised to find on going to the hospital one Monday morning that the man was dead. I was told by the interne that the patient had developed diarrhea on Saturday, the bowel refusing to retain the enemata any longer, and the man died on Monday morning before my visit.

This is a very interesting case. The stricture is so complete that you can not get any thing through it at all. I saw the man make four or five attempts to swallow some water, not a drop of which passed the stricture, judging from the amount that returned. The stricture is just about where I thought it was, a couple of inches below the thyroid cartilage. When I saw him he said the first symptom he had of stricture was eight months previous to that time; when I saw him the stricture was complete. The man had taken large doses of mercury and iodide of potassium, which did no good. I suppose it must be stricture, as a result of traumatism. I do not think it was the result of a neoplasm, although this was my opinion at the time. It does not look like an epithelioma; there is no apparent history of traumatism; no history of his having swallowed caustic of any kind. I believe now that it resulted from simple ulceration, the result of trauma.

Dr. A. M. Cartledge: It strikes me as being a remarkable stricture of the esophagus; it does not present the appearance of a malignant or syphilitic stricture, which we usually find. I say this from the simple appearance, although the stricture is a very severe one and is probably due to trauma originally; due to something he swallowed, causing ulceration and a resulting cicatrix.

Dr. Wm. Cheatham: I saw this patient during my term of service at the hospital, and never saw a man improve so much under rectal feeding. I tried both the bougie and esophagoscope, and each marked different depths of the stricture. I have used the esophagoscope on several cases of stricture very successfully. I had a case a few days ago complaining of stricture three or four inches down, which the esophagoscope showed to be spasmodic in character. This instrument can also be used to good advantage on growths in the esophagus. The only objectionable feature is that the patient has to be chloroformed and put in an exaggerated tracheotomy position, the head at almost right angles with the spinal column, to introduce the instrument. I tried it on an old man, and found it could not be used, because his neck was too stiff.

Dr. W. O. Roberts: I agree with what Dr. Cartledge has said; it looks very much like a case of stricture, the result of trauma. I have just been to see a young lady who was brought here two weeks ago from a distance. While at a party she said she swallowed a bone, and it lodged in her throat. This was on Saturday, two weeks ago. I saw her on the following Monday, with the family physician and another gentleman who pays particular attention to throat surgery, and made a careful examination, but could find no bone in the esophagus. The following Monday she suffered more, and her suffering continued to increase, her throat began to swell on the outside, and last Monday she had great difficulty in swallowing liquids (from last Monday week until last Monday), then ceased to be able to swallow at all. I examined her this evening, found her temperature 101.5° F., she has not taken any thing into her stomach since last Monday; both sides of her neck are badly swollen, extending nearly
up to the angle of the jaw, and on the inside I detected a post-pharyngeal abscess a little to the left of the center, which is undoubtedly a fluctuation.

Dr. C. Skinner: I will report a case in the same line, showing how a man was relieved. About four weeks ago a man came to me from Pineville, having been unable to swallow, even water, for about forty hours. I tried different sized tubes and could get nothing to pass, and sent him over to the Infirmary, with the expectation of going back later in the afternoon and trying it again. Just before my time to go his brother came over and said he had been able to swallow some water. He accomplished this by filling his mouth full of water and then forcing it down. I gave him some milk, which was swallowed in the same way. I then passed a tube about the size of your finger, and it marked two distinct strictures, one about one inch and a half below the other. The tube was grasped very firmly at these points. He went home without any further trouble.

Dr. E. R. Palmer: It is very questionable in my mind whether the trouble in Dr. Rodman's case could have been due to syphilis. First, because of the great rapidity of its development, and second, because it should have been followed by very decided amelioration under specific treatment if it were a tertiary lesion. With the uncertain history and absolute failure of specific agents to have any effect whatever, I should be inclined to attribute the trouble to trauma.

Dr. W. L. Rodman: I accept the theory of trauma. When I made the statement that there was no apparent history of trauma, I meant that he had never swallowed any sulphuric acid, lye, or any thing of that kind. If there was any traumatism, the patient did not remember it. I think in swallowing some bone it probably lodged for a time, causing simple ulceration, which resulted in stricture. I am satisfied in my own mind that it is not a syphilitic stricture. In the first place, syphilitic strictures of the esophagus are not so common as some think they are. Then, as Dr. Palmer says, it would not have developed so rapidly if it had been the result of a syphilitic attack ten or fifteen years ago. I questioned the man very carefully when he was brought into the ward, and am satisfied from the information he gave me that he had never had syphilis, but it was gonorrhea. He never had any eruption; never had throat trouble; never had enlarged glands; never lost any hair, and I have no reason to suspect that he had an attack of syphilis.

Dr. D. T. Smith: It seems to me in this case if there had been trauma sufficient to result in a stricture of this extent, the man certainly would have remembered it.

Dr. C. W. Kelly: Instead of reading a paper this evening, I will report a case or two which have come under my observation within the past five or six days. A week ago last Thursday I was called to see a young man, a medical student, suffering with pain over his heart. When I went into the room I found him very much excited; on examining his pulse found it was irregular, and on change of position the pulse would increase in rapidity. It was, on examination, found that there was a plastic effusion in the pericardium, and its movement to and fro with the heart sounds could be very easily made out. There was nothing peculiar in this case, no accumulation of fluid in the pericardial sac, and nothing except this plastic effusion.

No. 2. The second day after that one of Dr. Marvin's patients sent for me in a hurry, the message being that a gentleman was very ill. I called at the house and found another medical student who was suffering from a similar trouble, although it differed in some respects. As soon as I went into the room I heard a peculiar noise. I asked the young man who was in attendance what it was, and he said he did not know, but every four or five minutes we would hear that peculiar sound. I can compare it to nothing but the pulling of wet leather from a smooth stone, a sticky, sucking sound. I was very much interested in this peculiarity, and the patient was very anxious. The young man said that Sunday night he went to church, and while there had a severe pain, beginning at the scapula and terminating in the lower part of the sternum. The pain was so severe that he became anxious and went home. After reaching home he went to bed, lying upon his back, and found that he could not turn over.
The pain continued, and a physician was sent for. This is about the history of the case. I asked the patient if he had ever had an attack of rheumatism, and he said that he had never had rheumatism or a pain of any kind before. Upon examination I found that there was pericardial plastic trouble, and very strange to say, the heart seemed to have become attached to this body of lymph, that I suppose was poured out into the pericardial sac. The pulse was very irregular, there would be several beats, then an interval, the heart seeming to stick to the lymph. It ranged from forty to seventy-five beats per minute, and I was very much afraid the man was going to die. He was very much excited. I found the to-and-fro friction rale, which had been marked by the first or second sound of the heart. I suspected, first, that it was pleuritic trouble, the heart rubbing against the inflamed pleura; when I asked the patient to stoop forward, I found that the same peculiar sound continued, and I kept him in the recumbent position, perfectly flat. Yesterday the sound was disappearing; no longer that peculiar action of the heart; pulse had become regular; pain decreasing, and altogether the gentleman seems to have convalesced. The other case reported is also in the same condition, convalescence seems to have been established in both cases. I have kept these patients perfectly quiet, would not allow them to get up, fearing effusion, although to all appearances they seem well enough to get up. I have never seen a case before where simple effusion caused such interference with the heart's action, and have been unable to determine the cause in either case reported. As I stated, there is no history of rheumatism in either case, and both patients have heretofore enjoyed good health.

Dr. J. B. Marvin: I have seen more cases of pericarditis in dead halls than I have recognized during life. I have one or two very pretty specimens of this plastic effusion. I had a very interesting case of this kind at the City Hospital, in a negro boy, where there were the ordinary physical signs of pericarditis, and an area of increased dullness. From the appearance I thought of course it was effusion, and inserted my hypodermic needle, but could get nothing out of it. I repeated this at various times, and although I had demonstrated effusion, I could not get it out. Undoubtedly the lymph was so thick that it would not come out.

I was interested in one point made by Dr. Kelly, and that is one that I have been investigating carefully for the last few years, that is, the relation between endo- and pericarditis and rheumatism. I have certainly seen cases where I could not trace any history of rheumatism. In cases where there is no subsequent joint lesion, it seems to me rather doing violence to the true etiology to claim that they are rheumatic in origin, and I am satisfied we have been led astray by the older authorities.

Dr. Wm. Bailey: From the statements made by Dr. Kelly, I understand that these murmurs, so-called, were not synonymous with the heart's action. I would like to know if the doctor counted the repetition of these in a minute, so as to get at what was produced. A fluctuation murmur, pericardial, ought to correspond with the heart beats, just as an endocardial murmur will, and the fluctuation from pleurisy would correspond with the number of respirations per minute. But it is practically competent, I think, for an inflammation to be in one membrane and one of the other membranes produce a functional sound. It seems to me, as the fluctuation did not disappear when respiration was stopped, it indicates that it was pericarditis. Pericardial murmurs are, as a rule, communicated to the pericardial space, not transmitted as endocardial murmurs outside of that space.

As to the question of rheumatism: I think it is safe to say that the majority of these affections, either endo- or pericardial, are due to rheumatic causes, whether there are any other manifestations or not. Simply because we have no joint complication is not proof that it was not rheumatism.

The interesting point in the case reported by Dr. Kelly would seem to me to be to determine whether it was pericarditis or whether it was inflammation of the pleura so closely situated to it, so nearly related to it that the motion of the heart might cause fluctuation of the pleura; the quick convalescence and the appa-
rent short course of the case, too, might have some bearing upon the location or character of the di-case.

Dr. Wm. Cheatham: I would say in regard to the rheumatic element in these cases, we see a great deal of it in inflammations of the eye. Take, for instance, episcleritis and inflammations of other parts of the eye, without any other manifestations of rheumatism at the time. Many of these cases afterward develop joint complications confirming the diagnosis that it was rheumatism.

Dr. J. B. Marvin: How do you account for endocarditis following pneumonia? How do you explain cases of ulcerative endocarditis? How do you explain cases of endocarditis following measles and scarlet fever? I think Thomas or Wunderlich puts measles next to rheumatism in frequency as the cause of endocardial inflammation. Certainly the tendency among German authors is to ascribe endocarditis more frequently to bacterial infection than rheumatic influences.

Dr. C. W. Kelly: In reporting the cases in question I did not take into consideration the cause. I am satisfied in my own mind from observation that both endo- and pericardial troubles are often met with aside from rheumatic diathesis; for instance, in Bright's disease you often meet with pericardial trouble which is frequently the cause of death. You frequently meet with pericardial trouble in the course of typhoid fever, and in these cases it is usually fatal. An especially interesting feature in the cases referred to is that this effusion or lymph within the pericardium seemed to control the heart's action, the heart's action or rhythm seemed to be changed. It was to call attention to this fact that I reported the cases.

Dr. Wm. Bailey: It seems to me that a pulse of forty to seventy per minute is a very unusual thing in pericarditis.

Dr. C. W. Kelly: It depends altogether on the patient. If the patient is kept quiet the pulse will be slow, but if allowed to worry or change position the pulse becomes very rapid.

Dr. J. M. Ray: This specimen was removed post-mortem from a negro, aged forty-eight years. I saw him first in March; he came to my office suffering from partial loss of voice. Upon examination of his throat at that time I found a left laryngeal paralysis, his vocal cord being in what we call the cadaveric position, half-way between abduction and adduction. I saw him once or twice, and then he passed from under my observation. I saw nothing more of him until about the first of October, when he came to me one morning suffering very much from dyspnea. I sent him to the City Hospital and asked Dr. Rodman to take charge of him; afterward he was presented to the case by Dr. Yandell. On examination of the throat at that time it was found that the left laryngeal paralysis was complete, and the right vocal cord seemed partially paralyzed. We kept him quiet in the City Hospital for a few days, with instructions that he be carefully watched whenever he had one of his spasms of dyspnea. He grew better of this dyspnea. Dr. Rodman examined him physically and made diagnosis of aneurism of the arch of the aorta, although the symptoms were not very decided. In a day or two he was taken with a violent attack of dyspnea and died. By post-mortem examination we found a large aneurism of the arch of the aorta. Shortly before the patient died the intern performed a laryngotomy, but it afforded no relief. I assume that the dyspnea must have been due to the aneurism pressing upon the pneumogastric nerve on that side. How to account for the inability to abduct the cord on the opposite side I can not tell.

This case is particularly interesting to me, as I have a similar case under treatment now; a man, thirty-nine years of age, consulted me in April last, and on examination of his throat I found slight interference with the motion of his left vocal cord; he was very hoarse, and had acute local symptoms, edema, etc. Under local applications they all disappeared, and after thoroughly examining him I made up my mind that he had left vocal cord paralysis. I treated him for a while with little or no improvement in the symptoms, when he went to New York and consulted several specialists there, who told him he had paralysis of the left vocal cord, due to aneurism of the arch of the aorta. Then he came back, and under large doses of iodide of potassium his voice was improved, but the left vocal cord is still paral-
yzed. The right cord has taken on the duty of the disabled cord, and now he is able to talk in an ordinary tone without any trouble at all. The man has gained in flesh, is perfectly hale and hearty, and attends to his business as wholesale buyer for a large dry-goods house. To all appearances he is in perfect health.

Dr. Wm. Cheatham: Dr. Ray's case is certainly a very interesting one. By recent investigations of the recurrent laryngeal nerve all the symptoms can be easily explained. I have just had a similar case in the person of a white man, aged about sixty. He died of rupture of the aneurism. This case has a specific history. A post mortem was held, but the specimen was lost.

Dr. W. L. Rodman: There is very little to add to what Dr. Ray has said. The man was referred to the surgical ward, and after a very careful examination I thought I detected an aneurism of the arch of the aorta, and the autopsy has proven that my diagnosis was correct.

Dr. J. M. Ray: I have seen four cases of laryngeal paralysis since the first of January; in addition to the two here reported I have seen two others. One is a man seventy-six years of age, who has complete left laryngeal paralysis; another, a young lady who has complete paralysis of the left vocal cord. No evidence of aneurism can be found in either of these two cases. I notice that Bosworth reports having seen only fifteen cases of unilateral paralysis. Out of the fifteen cases the trouble was on the left side in eleven and on the right in four. Of the eleven on the left side, only four were due to aneurism, and he makes the statement that aneurism is not as often the cause of recurrent paralysis as we might at first be led to believe.

Dr. A. M. Cartledge: I would like to ask Dr. Vance to give us a short résumé of a case he reported to this Society seven years ago, then I will make a continued report of it. I refer to the boy who was shot in the region of the bladder.

Dr. A. M. Vance: Seven or eight years ago I was called in an emergency by Dr. Hays to see a patient who had been shot in the belly. I found a boy about nine years of age in shock with about this history: That he had a toy pistol and had bought some Flobert cartridges without balls in them, and in endeavoring to load this pistol the bullet that he had put in first would not allow the cartridge to go in; therefore he took a railroad spike to hammer in the cartridge, which was exploded, the ball entering his abdomen about two and one half inches below the navel. Dr. Hays, who was the family physician, was called about half an hour after the accident. The boy was treated for shock, the only symptom or evidence of his having been shot was hemorrhage from the urethra, which was not very excessive. I saw him again in the afternoon; he had reacted fairly well, and recovered without any further manifestations. I told the family at that time that I thought the bullet had entered the bladder, and believed in years to come an operation would have to be performed for its removal, as a stone would probably form around it.

Dr. A. M. Cartledge: Some two months ago I saw this patient, with a physician of this city, and substantially the same history was given me as detailed by Dr. Vance. From the subsequent history we all believed that it was a case of bullet wound of the abdominal cavity that had gotten well without a laparotomy. The question was discussed for a long time as to the propriety of doing a laparotomy without any symptoms of a general character indicating the operation. When I saw the patient he was suffering from an abscess (which had been opened by his physician) two inches below the umbilicus and a little to the left of the median line. The abscess opened was still discharging. On account of some trouble in his family the operation was postponed, and the sinus closed, and they thought he was about well. Two weeks ago the abscess again refilled in the same region, and his physician again opened it a few days ago. I then told them to send him to the infirmary and I would see if we could follow up the original sinus and locate and remove the offending body. We introduced a probe, which could be pushed backward at least five inches; I am quite sure it went behind the pubic bone to the left side of the bladder. Then I determined to follow it up in this direction; it was dilated apparently to the
bottom, but I could not feel any foreign body with the dilator. I then introduced a soft catheter with a curette, probably about six inches in this direction, but it being of soft material could not detect any foreign body. I again introduced the dilator, following up the old sinus, and finally detected the bullet, but the question was, how to remove it through the very small sinus. After some little difficulty this small bullet was removed from the left side of the bladder neck. The sinus was packed from the bottom with gauze. I think the bullet could probably have been removed from an incision through the perineum, if it could have been located. He has made an uninterrupted recovery.

Dr. W. O. Roberts: Was the hemorrhage from the bladder during micturition?

Dr. A. M. Vance: Yes. There was only one hemorrhage and that was during micturition. The boy was relieved of all his symptoms very quickly; was kept in bed for about ten days. I saw him three times only. He was then about nine years of age.

Dr. E. R. Palmer: I have recently seen two cases of chancre in the female, on the right labium minus, occurring as the initial lesion. I suspected syphilis in both cases, but discovered it by being led through other reasons to make an examination. In one case the chancre has been followed by secondary eruption, which is now fading; the other is in bed to-night with syphilitic fever.

Another case is a man who developed chancre eight weeks after copulation. This is the second case which has come under my observation where infection has come from the same female, the patients each supposing they had contracted gonorrhea.

The fourth case came to my office four days ago with a small but plainly defined chancre to the left of the frenum. The second or third visit he made he called my attention to a fever blister (as he called it) upon his lip, which I found upon examination to be an immense chancre. It was a case of double infection, at two distinct points, contracted from the same female and at the same time; infecting his lip from kissing and the penis from coitus.

J. E. HAYS,
Secretary

NEW YORK ACADEMY OF MEDICINE—
SECTION IN ORTHOPEDIC SURGERY.

Stated Meeting October 21, 1892, Henry Linz
Taylor, M.D., Chairman.

Dr. L. W. Hubbard presented a case of Pseudo-Hypertrophic Paralysis, which, although not exactly orthopedic, might not be entirely without interest in connection with the paper of the evening. It was also more than usually interesting, as the condition is ordinarily not seen until a later stage. The boy had probably had the present trouble since he was five or six years old. He did not begin to walk until he had reached the age of two and a half years, although all the other children in the family began walking at thirteen months. His general health has been quite good, but the parents noticed that he could not run around. At present he stands in a position of lordosis, with his feet well apart; there is slight ankle clonus, and absence of the patellar reflexes; muscular weakness is noticeable in the anterior part of the thigh. So far the electrical reactions are negative. When he runs he throws himself from side to side.

Dr. N. M. Shaffer said he had examined the case when it first applied for treatment at the Orthopedic Dispensary, and at that time he made a diagnosis, by exclusion, of pseudo-hypertrophic paralysis, and Dr. M. A. Starr, who saw the case in consultation, also considered it to be in the atrophic stage of this disease. The speaker said he could distinctly recall having seen two or three such instances, where all the signs of the hypertrophic stage were subsequently developed.

In one family three children were all affected in the same way, but careful inquiry failed to elicit any evidence whatever of hereditary influence.

Dr. A. B. Judson had observed cases in two families; in one, two brothers, and in the other a brother and sister were affected. These and similar observations by Dr. Poore and others indicated that heredity is to be considered in the interesting but still unanswered question of etiology. He recalled an incipient case, in which a previous diagnosis of Pott's disease had been based on the peculiarity of gait, and
an apparent spinal disability in rising from the recumbent position.

The chairman had known of a number of instances in which several members of one family had been affected in this way, and he thought it was common to find that they were usually late in learning to walk. He had nothing new to offer in regard to the etiology.

Rachitic Pseudo-Paralysis and its Treatment was the title of a paper read by Dr. S. Ketch.

The author dwelt particularly on the importance of recognizing this condition, and gave its differential points as distinguished from infantile paralysis and the paraplegia of Pott's disease, with which it was most frequently confounded. He mentioned many other conditions which this condition resembled, and which it had been mistaken for, such as spas tic paralysis, post-diptheritic paralysis, and even pseudo-hypertrophic paralysis. The clinical features were given, and corroborated those already described in Dr. H. W. Berg's paper, read before the section some years ago, and which the author thought had not been sufficiently appreciated by the general practitioner. The question of the occurrence of deformity with this pseudo-palsy was brought out. The author thought that in many cases there was no deformity, as the children had never walked, and the superincumbent weight had not acted as a factor in the production of bow legs and knock-knee. He had observed cases, however, that had deformity present. Some of these were probably cases of "fetal rachitis," and somewhere the muscular condition came on after the child had already walked.

As to treatment, he advised primarily regulation of the diet, baths, and general hygiene. Medicinally, stress was placed on the use of phosphorus. Locally, electricity and massage, and inunctions with cod-liver oil were recommended. The question of the use of "Braces" was gone into thoroughly, the author being of the opinion that their use is unjustifiable while the muscular weakness remains, and prefers to wait until a later period, should deformity be present, when it can be remedied either by mechanical or by operative means.

DISCUSSION.

Dr. Shaffer said that quite recently he had seen a case of rachitic kyphosis, which had been referred to him by an eminent medical practitioner, on the supposition that it was a case of Pott's disease, and not long ago a case of rachitic paralysis had been sent to him with a diagnosis of double hip joint disease. He would only add to the points in differential diagnosis, so well laid down, that the hyperesthetic stage of true poliomyelitis anterior is very like the tender condition of the muscles which we find in rachitic paralysis. He had seen in the course of a few weeks five or six cases of poliomyelitis anterior in the very early stage, and in two or three of them this hyperesthetic condition was present, and closely simulated pseudo-rachitic paralysis. One without much experience might very readily mistake the tender stage of the rachitic condition for the hyperesthetic stage of infantile paralysis. The differential diagnosis between the rachitic curve of the spine and the curve of Pott's disease is readily made by the ease with which the spine can be made to describe the normal motion, and also by the diminution or disappearance of the kyphosis by placing the child in the recumbent position. Still it must be remembered that rachitic curves do show some spinal rigidity on attempting to hyper-extend the spine. The importance of this subject to the general practitioner is well shown by the case of a little girl in St. Luke's Hospital, in which flexion and extension of the thighs were limited, as was also inward rotation during flexion. The child complained of pain, and her general condition closely simulated the first state of hip-joint disease. This pseudo-rachitic muscular condition is not accompanied, in the majority of cases, by deformity, but the symptoms precede the stage of deformity. As soon as the muscular tenderness begins to subside, these children get on their feet, and then the influence of the superincumbent weight of the body comes into play. He was glad that the author had emphasized Dr. Berg's comments on this subject.

Dr. Judson referred to the peculiar locomotion of these patients. Such a child would sit
on the floor with his feet before him, and by raising first on one and then on the other ischiatric tuberosity, and by the help of his hands placed on the floor, would move about with considerable rapidity, but in a remarkably grotesque manner. The activity shown in this way would indicate that tenderness of the bones is not an important, and certainly not a constant feature. It is probable that such a child postpones walking because he is disinclined to trust his corporeal weight on the softened long bones of the lower extremities; it is another instance of the necessity of taking the weight of the body into account in the observation and treatment of orthopedic patients. He agreed with Dr. Ketch in condemning all attempts to coax or compel such a child to walk before he is ready to do so of his own accord.

Dr. Joseph Collins said that as a neurologist he had been much interested in the topic for discussion, and he would like to ask for further information in regard to the etiology and pathology. He would also like to know why the last case reported in the paper might not be considered a mild form of multiple neuritis, and also why we could not call most of these cases instances of autotoxemia manifesting itself through the sensory and motor nerves. The clinical history, under such circumstances, would be such as had just been given, and the treatment exactly that ordinarily prescribed by the neurologist. These are the cases which the neurologist would term "the paresis of toxemia." Admitting the toxemia, the treatment should be by elimination, by checking the formation of leucamines or ferments, and by keeping the child entirely rest.

Dr. V. L. Carr said that at the time Dr. Berg's paper was presented to the section, in 1889, he was preparing an article for the American Pediatric Society on "Some Manifestations of Rachitis not Associated with Severe Bone Changes." From a considerable experience among children, he could say that rachitic muscular weakness is almost always without severe bone changes. Recently, attention has been directed to the association of scurvy with rachitis, and in this country Dr. Northrup has reported a number of such cases. In the case described by the author, and which he saw in consultation, the excessive epiphyseal tenderness and general hyperesthesia would seem to indicate the association of scurvy with the rachitic condition described. Both rachitis and scurvy are conditions of malnutrition, the latter being a more aggravated form. Both are amenable to very much the same treatment, viz., regulation of the diet and the administration of phosphates and cod-liver oil. When the tenderness is excessive, and accompanied by swelling around the joints, he was cautious about making a diagnosis until he had inquired sufficiently into the history to enable him to positively exclude scurvy. Where the scorbutic tendency was present, the use of fruit juices and of fresh beef is indicated, in addition to the treatment already mentioned. The dietetic management of rachitic cases in children is often quite difficult, owing to the existence of an internal catarrh, which prevents the ready absorption of cod-liver oil; hence, an excellent preparatory treatment is to administer an alkali, and sometimes a cathartic. These children have often been fed largely on starches and sugars, and dislike milk, and under these circumstances the change to a proper milk diet should be made very gradually, otherwise an attack of acute indigestion will be the result. It is quite possible that a poisoning of the system may be present, on account of the fat and sugar upon which most of these children have been fed, this kind of food making fat, rather than blood; but the disease itself shows no evidence of a condition of self-poisoning.

Dr. Halsted Myers described a case of marked rachitis occurring in his service at St. Luke's Hospital, in which the kyphosis was so rigid that Pott's disease could not be excluded until after three weeks of observation; the pseudo-paraplegia had lasted two years, a longer duration than he had ever seen before. The power was gradually improving, though the child was still unable to stand; pseudo-hypertrophic paralysis and poliomyelitis had been excluded.

Dr. Royal Whitman asked as to the intellectual capacity of the child. Cases of delayed cerebral development or semi-idiotic children
were often brought for examination because they were unable to stand. These patients often suffered from rachitis, and it was occasionally difficult to differentiate between the want of power or disinclination to stand, the effect of disease, and that resulting from impairment of the cerebral centers.

Dr. Myers replied that in his case the child possessed average intelligence.

Dr. H. R. Sayre said the symptoms of rachitic paralysis were often mistaken for Pott's disease, and he had frequently noticed more resistant curves of the spine than Dr. Shaffer's remarks would lead us to believe occurred, so that in a number of these cases rest in the horizontal position for a long time was requisite, before the curve of the spine disappeared. While the diagnosis rests upon the history of the case and its general course, there was a rachitic state present long before the development of these bone deformities. The pain and tenderness are a benefit, in so far as they prevent the child from walking too soon, and therefore save it from greater deformity.

Dr. H. W. Berg said that the important thing to remember about the pseudo-paralysis of rachitis was that it was really not a paralysis; this is the first step in the successful treatment of these cases. Regarding the differential diagnosis between rachitis and multiple neuritis, he said that the one is an organic disease, resulting in organic muscular changes, while the other is a functional disease. The organic changes resulting from a multiple neuritis would very soon give rise to unmistakable symptoms, while the pseudo-paralysis of rachitis never resulted in any change, either in the muscles or in the nerves.

Dr. Ketch, in closing the discussion, said that his object in writing the paper was to emphasize the clinical features already given in the paper by Dr. Berg, and to bring the differential points especially to the attention of the general practitioner. He had no new facts to present, except the question of the presence or absence of deformity in these cases, and the discussion had shown a remarkable unanimity of opinion regarding the absence of deformity. Personally, he thought he had seen quite a number of cases where muscular weakness and deformity were both present, and also that he had seen many cases where this trouble still persisted at the age of three or four years, and was associated with some deformity. It was not at all unlikely that some of these were instances of what is called "fetal rachitis." In his paper read before the American Orthopedic Association, on "Posterior Rachitic Curvature," he had stated positively that there was no reason why rachitis and caries of the spine should not co-exist, and he was sure that he had seen such a condition. This might explain the case reported by Dr. Myers. It must not be forgotten that in many of these cases of rachitic paralysis the children have walked for some time before the muscular weakness develops, and that in these cases, when this condition is first noticed, the mother describes it by saying that the child "has suddenly been taken off its legs."

A Modification of Thomas' Wrench. Dr. Myers showed a modification of Thomas' Wrench much more simple, and costing about one fourth as much as the original. The Thomas Wrench could overcome an equinus, the rotation on the antero-posterior axis, and the abduction of the foot as a whole, but it did not seem well designed to correct the abduction of the fore-foot in relation to the heel, and to do this Dr. Myers had attached to the distal jaw of the wrench another handle bar, so that he had two levers of the second class having a common fulcrum. This fulcrum was placed over or just behind the cuboid, and the two other jaws clamped side by side on the inside of the foot. When the handles were separated, the jaws also separated, so that the tissues on the inside of the foot were stretched. The outer border of the foot was not crushed inward between two fixed points of resistance, which would be very undesirable.

HENRY LING TAYLOR, M. D.,
Chairman.

The last New York Legislature at the close of the session passed a law giving judges the power to commit women, if confirmed drunkards or addicted to the excessive use of a narcotic drug, to a new private institution erected on the Hudson for that purpose.
Reviews and Bibliography.


This is a well-written and attractively-printed volume on the subjects it embraces, and does credit to the talented and industrious author. In doctrine and treatment of the subjects referred to it follows in accepted lines, and in most points exhibits a spirit of commendable fairness.

Croupous pneumonia the author does not feel fully justified in placing among the infectious diseases, but leans strongly to that view. In treatment he condemns the new antipyrtes, for which we thank him in the name of the sick and those who otherwise might be widows or orphans.

His recommendation of digitalis in edema of the lungs or in any form of lung trouble needs, it seems to us, some additional suggestions of precaution. When one contemplates the cyanosis produced by not large doses of digitalis in this disease, he would hardly venture in its use without great care as to the dosage. The author follows his illustrious father in the condemnation of alcohol.

In the consideration of the other subjects of the title, the line of discussion presents no marked departure from accepted doctrines, and on the whole Dr. Davis has produced an agreeable and acceptable work.


Few men in any land have had finer opportunities for forming a correct judgment as to the proper treatment of the diseases of women than has Professor Alexander J. C. Skene, and yet, for some reason not easy to give, he does not exercise the influence on professional opinion that many others do who appear to have no greater advantages.

In his work he seeks to teach, not so much by generalizations and the presentation of types, as by the graphic description of particular diseased conditions and their treatment. While this, it must be admitted, is rather an inferior order of work, it makes very interesting reading. Thus it would be hardly possible to produce a more effective description of an operation than that given of the operation for fistula in ano.

The author favors the electrical treatment of fibroids of the uterus, and in this stands with a large and growing class as to its efficacy in a good proportion of cases.

On the subject of the removal of the ovaries and tubes he is decidedly conservative. In reference to the removal of the ovaries for ovariitis and neuralgia, he declares that but few subsequently enjoy good general health and vigor. This statement, he says, is at variance with much of the published literature of the subject, but more in accordance with actual facts.

If prompt surgical interference in these cases were best, there is no reason why Dr. Skene should not resort to it, and his ability to judge can not well be doubted. He stands between the extremes, where it is safe to assume the truth is found. Indeed, if the half wild crowd who seem to think that the main object in giving women ovaries was to furnish opportunity for ambitious surgeons to display their brilliancy were correct in their views, the Creator ought long since to have realized his mistake in not perpetuating the opossum type in evolution by leaving the bellies of women half open, ready for operation.

In the treatment of ectopic pregnancy it must be admitted that the author has not revised his work up to the standard of the procedures in that condition at present most approved.

The chapter on the treatment of vesical troubles is of the most satisfactory character.

To conclude, while the book is marked by an amount of case-taking that would not be
regarded as admitting many repetitions in our medical reading, still as a sample of an interesting and fresh work of an old style, as the result of large experience, a gentle heart and a level head, it will find many friends.

D. T. S.


This is a neatly gotten-up volume in the orthodox line, containing no contribution to the stock of existing knowledge, and nothing that does not find warrant in the approved literature of the subject. The style is not so concise and direct as some other treatises, but still makes pleasant reading.

In the etiology of complication the author has not adopted the most recent explanation of the cause of hypertrophy of the heart, viz., that it is due to reflex nerve influence. It is not enough, it seems to us, to say that the heart becomes hypertrophied because extra labor is imposed on it by thickening or rigidity of the arteries or a narrowing of their lumen. The question still remains, why does the heart increase its work? There is but one answer. The tissues do not get sufficient healthy oxygen-bearing blood, and in consequence complaining to the nerve centers controlling the heart's action, they compel that organ to do an amount of overwork that results in its hypertrophy. This is the uniform result in every case, whether there is too little blood sent out or blood of inferior quality, or the channels are obstructed, provided the organism has sufficient vitality to produce hypertrophy.

D. T. S.

The Pathology and Prevention of Influenza.


The purpose of the distinguished author of this little work is to show that the symptoms of influenza are owing to the action in the system of a special poison secreted by a pathogenic bacillus; that this poison has a special affinity to a definite center in the nervous system, which is irritated and depressed by it, that an antidote which is able to neutralize the effects of the poison is formed in the blood of the patient and tends to effect a spontaneous cure of the disease, and that the nearest approach to this antidote which we at present possess appears to be animal vaccine-lymph, which should therefore be used as a preventive of influenza in case another epidemic of that distemper should break out in the country.

The contention that revaccination renders influenza from twelve to twenty times less fatal, and far milder in non-fatal cases, if verified, must prove of immense importance in future visitations of the plague.

At all events, the little book will be a helpful treatise for those who may have to deal with the next visitation, expected about 1925.

D. T. S.


The title indicates very clearly the character of this work. It consists of a collection of abstracts from the writings of men eminent in this and other countries. This volume alone contains 1,511 favorite prescriptions, which are very conveniently arranged. This will undoubtedly render the book popular; perhaps too popular with the routine practitioner, for the tendency is great to overlook the pathology and the physiological action of remedies to study simply conclusions. To the really scientific physician the book albeit is very interesting and instructive. The work is handsomely gotten up and does credit to the publishers.

J. L. H.

It can hardly be doubted that the business success of the author of this work entitles him to be heard on the business questions the doctor has to meet in the pursuit of his profession. While not a very marked success as an example of mere book-making, it contains much information and many suggestions of value. Most physicians of the better class, scientifically speaking, could hardly fail to profit by its perusal. There are physicians, we opine, who do not stand greatly in need of its suggestions.

D. T. S.


Correspondence.

LONDON LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

A New Terror; Report of the Inspector of Retreats for Inebriates; the Metropolitan Water Supply; Vaccination; Strange Suicide; Dr. Ogle on the Marriage Rate; Cholera Prevention; Strange Seasoning; Fin de Siècle Medical Competition; A New Form in Administering the Oath.

Opticians have recently discovered in certain quarters of London that ophthalmia is increasing, and they attribute it to the fumes which arise from wood pavement after rain. It is also alleged that wood-pavement fumes are responsible for even greater optical changes than mere ophthalmia. They change the color of the eyes. Up to the present no information has been given as to the cause of these phenomena.

"After many years' experience I am firmly convinced that nothing but compulsory legislation can possibly cope with this serious and growing evil." This emphatic pronouncement occurs in the twelfth annual report of the inspector of retreats for inebriates. Medical men have noted that before the act was passed many dipsomaniacs professed to be most willing to submit to prolonged restraint for the purpose of permanent cure, but no sooner was the opportunity afforded than the large majority drew back. Last year the total number who entered retreats for twelve months was only one hundred and fifteen. A faulty feature of the present scheme is that only sufferers in easy circumstances can avail themselves of its benefits. Dr. Richardson considers that in order to make the act really operative as a check upon dipsomania its provisions require enlargement in two directions, viz., confirmed inebriates should be rendered subject to compulsory incarceration like other insane people, and there should be an inferior class of rate-aided asylums for those who could not afford the high charges at the superior establishments. Dr. Richardson says that until these changes are introduced the act will never be much more than a finger post pointing out the road that ought to be taken.

On the subject of the character of the metropolitan water supply Dr. Ray Lankester related to the Royal Commission the results of his investigations into the bacteriology of the waters delivered by the companies. His general conclusion was that they were actually free from matter injurious to health. The increased care and attention of medical men to the destruction of typhoid dejecta removed further and further the probability of organisms reaching the Thames, while the greater attention paid to sewage farms would tend to render the stream still more pure.

An important contribution to the literature of vaccination in its relation to smallpox has
been issued by the Imperial Health Office in Berlin. From statistics of deaths from smallpox throughout the empire in 1886-90 it is concluded that the chance of a vaccinated child of two years dying of smallpox is extremely slight, only two deaths per million living at that age happening each year. For a person of fifty this chance is smaller than that of a child of two, but higher than that of a middle-aged person. Again, from comparison of deaths in 229 German towns and selected towns in other countries, it is found that though there were fewer deaths in English towns there were 10 times more in Swiss, 13 in Hungarian, 42 in Belgian, 56 in French, 60 in Austrian, and 97 times more in Italian towns. Besides the above statistics, the German report contains minute details of 140 cases of smallpox that were officially notified from different parts during 1890, mostly from Bavaria and Alsace-Lorraine. From particulars of these cases it is seen that the majority of them were introduced, as into Bavaria from Bohemia, and into Alsace from France, and that the fatal and severe cases were, as a rule, in people who were either unvaccinated or had not been revaccinated, whereas the course of the disease in the few revaccinated who were attacked was always mild, terminating in recovery. These facts have been presented to the attention of the English Royal Commission now sitting to inquire into the working of the Vaccination Acts.

A singular suicide has been investigated by the Bradford coroner. A young man employed as a carter deliberately committed suicide by holding his face in a stable tub in which there were a few inches of water. No evidence was forthcoming to explain the act. A peculiar incident in connection with the matter was that the man was identified as two different individuals, and that rival claimants quarreled in the mortuary over his body.

Among other witnesses who gave evidence before the Labor Commission was Dr. Ogle, Superintendent of Statistics, who furnished interesting tables showing the lower the social scale the earlier the age at which people marry. For instance, out of 1,000 miners 704 wed when they are under 25, and 169 under 21, while in the professional and independent classes the corresponding proportions are 151 and 7. Of miners' wives 439 per 1,000 marry under 21 as against 127 of the wealthier classes. Early marriages among the poor mean large families; but this, according to Dr. Ogle, is tempered by the enormous mortality among the children. With a view of showing the relation between these deaths and drinking habits, Dr. Ogle said he had found that of about a couple of thousand children a year who died from suffocation in bed three times as many cases occur on Saturday night as on any other night in the week.

French doctors are full of praise for the prompt and efficient measures taken to prevent the propagation of cholera in London and the ports of the United Kingdom. They point out that in the Havre hospitals the disinfection and isolation were both expensive and insufficient, whereas in England the clothes and all objects belonging to the stricken persons were buried straight away, and the success of so cheap and easy a method showed beyond a shadow of doubt that it was possible to stop the progress of cholera by that means. Dr. Gilbert, who studied the epidemic closely in the Havre hospitals, speaking before the Paris Academy of Medicine, said that had the English not acted in the matter with such promptitude their trade would have been crippled.

A Birmingham cook made a little mistake the other day. She stuffed a goose with a mixture of stramonium and belladonna instead of sage. It appears that this mixture was usually used by her master for asthma, and how she mistook it for sage is unexplained. The host and his guests at dinner had a most unpleasant time. A feeling of intoxication came over them, while the pupils of their eyes dilated and their throats burned. The dinner closed with the arrival of a doctor and a course of emetics. One guest slept several hours, while every one else existed in the most doubtful frame of mind.

The following is taken from a local newspaper published at a well-known midland manufacturing town: "The spirit of keen competition seems to have at last permeated the medical profession in Dukinfield. A week or two ago Dr. Buxendell and Dr. Clarke opened dispensaries in different parts of the town at a
charge of one penny per member. Now we hear that Dr. Booth and Dr. Park have entered into competition and commenced dispensaries (in one case next to an establishment run by Dr. Buxendell and Clarke) at the small fee of one half penny per week membership.”

At the first inquest held by the newly appointed coroner for one of the divisions of Middlesex Dr. W. B. Hogy caused the jury to be sworn without the formality of kissing the book, each person raising the right hand while the oath was being administered. A recent alteration in the law permits the oath to be administered in this manner. The old, uncleanly practice of “kissing the book” will probably soon be looked upon as only a survival of the dark ages.

LONDON, NOVEMBER, 1892.

Abstracts and Selections.

ON THE TREATMENT OF PLACENTA PREVIA.

The subject of the treatment of placenta previa came up before the First International Congress of Gynecology and Obstetrics at the recent meeting in Brussels (September 14 to 17, 1892), and an interesting and suggestive paper was read by Dr. Berry Hart, referee.

He began by cautioning against forcible attempt at delivery before the cervix is well dilated. Every attempt made to introduce the hand through the cervix in order to detach the placenta in totality or to extract the infant is made at the risk of lacerating or confusing the womb. The extraction of the infant by the cervix, even when it is not necessary to introduce the hand into the uterus, is a procedure which gives but little “chance of life to the child, and is not free from danger to the mother; hence a very important indication is to act without violence and precipitation.”

To arrest the hemorrhage the complete detachment of the placenta is not indispensable.

Since the dilatation of the cervical portion of the uterus is necessary to give passage to the child, and since in the first period of this dilatation hemorrhage may supervene, the indication is to hasten this period as much as possible by Barnes’ dilators; if labor is on the point of commencing, rupture of the membranes may be sufficient to bring on uterine contractions and stop the hemorrhage. The temporary use of the tampon may be required; the tamponading should be done thoroughly with iodoform gauze. At the critical moment, when the total detachment of the placenta is dangerous or impracticable, it may be possible by the introduction of the index finger through the cervix to separate the portion of the placenta which is adherent to the inferior segment of the uterus. By this procedure the internal orifice is freed from adhesions which hinder its regular dilatation, and the contraction of this segment of the uterus is facilitated, which favors the arrest of the hemorrhage. Dr. Hart emphasized the importance of the Barnes’ dilators as a safe and ready means for obtaining prompt and thorough dilatation of the cervix. When such dilatation is effected it is a question between delivery by the forceps, version or embriotomy. When the head presents, the forceps should be used, as this method is much safer for the child, and even for the mother, than version. What is in fact peculiar to the teachings of this writer is his general condemnation of version, which he would reserve for special occasions. “It must,” he says, “be admitted that when we have recourse to version in a head presentation we go completely contrary to the means indicated by nature. I am aware that it is claimed that by this procedure we facilitate dilatation of the cervix by exercising tractions on the legs and body of the infant, and that, on the other hand, the head, or other fetal part, by its contact with the inferior segment of the uterus, makes salutary pressure on the surface which is the seat of the hemorrhage. To this I would reply that both these ends are better subserved, first, by the hydrostatic dilator, and then by the forceps; of course version may still be resorted to if the forceps fails. Version demands more force, which does harm to the patient and diminishes the chances of life to the child.”

Dr. Hart claims very gratifying results from this method, having saved more mothers and more children than formerly, when he relied on the Braxton-Hicks bi-manual method. Whole hematomas of children have, he says, been sacrificed to false theories, but placenta previa, managed on scientific principles, is destined to be increasingly less fatal to infants. His own experience, since he has resorted to this method, has enabled him to record thirty-three per cent of children saved.

We should remember that in most cases which come before the physician’s notice, gestation is not at full term, and the uterus is but imperfectly developed. Such uteri do not always dilate readily, and a forced accouchement generally entails contusions and even lacerations of the organ. The child to be extracted is, it is true, very diminutive, but the danger is still none the less real. The advocates of forced accouchement claim that by instant de-
livery the chances of puerperal infection are lessened; but this may well be doubted, when it is remembered that the most skillful accoucheur finds it difficult to avoid contusions and lacerations, which open the door to contagion. The only way to diminish the danger of such lesions is to avoid all violence in the dilatation of the os and cervix, and in the extraction of the fetus, two things very difficult to realize when version is resorted to from the very first. This danger can only be reduced to the minimum when the accoucheur effects the dilatation with gentleness by Barnes' dilators, and delivers the child by means of the forceps, if the head presents.

Such are the principal points presented in this paper, which may lead obstetricians to ask whether the methods on which they have relied in this dangerous accident in gestation are really the best methods, and whether, in some cases, the mode of practice which Dr. Hart has pointed out may not give both mother and child a better chance. Of course, it must be admitted that oftentimes the physician is called to a case where the flowing is terrific and life is almost extinct; there can be no thought of exciting uterine contraction, or even of effecting slow dilatation by means of water-bags; the os is dilated or dilatable; there is but one urgent indication, and that is to deliver as soon as possible, and then, if the hemorrhage continues, to endeavor by hot intra-uterine injections to arrest it. In such a case as we have imagined (and it is not a mere fancy picture, but is a part of the objective experience of many of the readers of the Journal), the presentation is still high and forceps delivery impracticable. What better can be done than boldly to insert the hand into the uterus, push to one side the placenta, if it be in the way, find the feet, and perform version? When once version is effected and the body of the child brought down into the passages, by its pressure on the bleeding vessel it will stop the hemorrhage, and the accoucheur can then take his time about completing the delivery. It is doubtless well to use the combined external and internal mode of version when this is possible. This method, as Hicks was the first to show, does not require that the whole hand should be introduced into the womb in the case of only partially dilated cervix, but only two fingers, the fetus being so manipulated by one hand over the mother's abdomen as to be brought within the control of the accoucheur's other hand. Lomer in- dorses the Hicks method with additions of his own, and insists especially on the necessity of the utmost slowness and gentleness in nicking the tractions. Slow delivery prevents contusion and laceration of the cervix and perineum.

In the case of great rigidity of the os and cervix Lomer favors tamponading as a preparatory measure, which if done thoroughly will effectually control hemorrhage and give the os time to dilate. It will be seen from the above abstract that Hart also favors the tampon as an occasional expedient, while, as a rule, preferring the hydrostatic dilator.—*Boston Medical and Surgical Journal.*

**Sea-sickness.**—One of the most obstinate of ailments and most trying to the self-sufficiency of the infallible therapist is sea-sickness. This is not because there are not enough remedies for it, but if only one twentieth of those recommended could be relied upon as efficient, the malady would become but a memory and the sea would be robbed of its greatest of terrors. But we are not going to inflict a treatise on sea-sickness upon the patient reader, wishing simply to put on record, for the benefit of American voyagers, a preventive measure proposed by Dr. Ames Brunton, in the British Medical Journal of recent date. This consists in the applying of a leather strap round the lower part of the thorax and epigastrium. It is put on previous to going on board, and is drawn very tight, and must be kept on till the traveler gains his "sea-legs." This hint, Dr. Brunton says, he "obtained from a gentleman who was previously a martyr to sea-sickness, but now in his frequent journeys across the Channel makes them with comfort and triumph, and, needless to say, perfect immunity from sickness. If necessary, a pad over the epigastrium can be added. It is possible that the compression over the liver may have something to do with the beneficial action of the strapping, which prevents the sinking which heralds the nausea."

We have no fault to find with the simplicity of this means, and the writer claims that it is as efficient as simple, being "in the great majority of cases an absolute preventive of seasickness." Possibly it is, yet we can but wonder why, then, our sweet sisters, whose dear little epigastria are tightly, and often even painfully, compressed by the cruel corset, should suffer so universally from this most distressing and unromantic of ills.—*Medical Record.*

**Women Medical Students.**—The faculty of the Columbian University in Washington have withdrawn the privileges which they have previously offered to women in the medical department. The reason assigned is that the presence of women as students kept men away, and they had no desire to become a female seminary, and that the teaching of men and women together is demoralizing to both.
THE BRAIN CENTERS OF THE EMOTIONS: ARE THERE SUCH CENTERS?

Such is the query propounded by the Boston Medical and Surgical Journal. And in justification of such a question our esteemed contemporary quotes the following from the pen of Dr. S. V. Clevenger (American Naturalist, November, 1892):

The emotions have vaguely been regarded as having several centers, or a single center. Often in physiological writings we encounter the term "emotional center," and reasons more or less incorrect have been advanced locating this "emotional center" at the base of the brain.

Emotionalism, Dr. Clevenger says, in a broad sense is nothing more nor less than degrees of excitement. So from this standpoint it is a condition, an exaltation or depression of the nerve-centers; and hence it would be absurd to look for its centers. Joy, grief, anger, fear, jealousy, are all conditions which may engage every cell in the body at times. The fact that there may be crying and laughing centers in the medulla does not constitute that portion an emotional center any more than we are justified in calling the leg centers in the brain cortex kicking-centers. The laugh and cry may be purely automatic, and without reference to the emotions at all. Beside, some emotional exhibitions, such as tremblings and pallor, indicate that during emotional excitement nerve force is pretty well diffused throughout the body, and that no particular set of nerves is engaged. It would seem that in such instances there is excellent evidence of the absence of an emotional center, and the shaken-up general nervous system can find no special outlet for the feeling.

When a rupture of the blood-vessel in the motor centers of the brain causes paralysis, and in cerebral degenerative states, such as are induced by alcoholism and senility, there is an increase of emotionalism. The patient may cry and laugh easily; but in such instances the higher control is lost, impressions are diverted from former channels in the brain to the mere automatic ones lower down, but the emotionalism is the product of brain injury, and is a debased condition, and hence has no center in the brain. The fact that the brain-base, at its junction with the spinal cord, has laughing and crying reflex centers may warrant this area being named an emotional center in a very limited sense; but, strictly speaking, there can be no such thing as a center for the emotions, for laughing and crying are but two among a great number of emotional exhibitions, and they may recur unconsciously.

The efforts of the would-be materialists to reduce the finer functions of the mind to a physical basis are, to say the least, extraordinary.

We may measure reflex action, and locate certain impulses in the cerebral cortex or basal ganglia, but when we attempt to account for the emotions or finer workings of the soul we are utterly at sea.

No man can say that honor, love, fidelity, etc., are the result of the oxidation of protoplasmic matter in the cerebrum. The brain may be called the organ of the mind, but he who would call the brain the mind would be as Huxley says the mathematician would be "who should mistake the x's and y's wherewith he works his problems for real entities"

Matter and force, as the materialist conceives them, can never account for the unspeakable phenomena of intellect, and the hunt for emotional centers in the brain must in the nature of the case be futile.

Prof. William Bailey, of the State Board of Health, has just returned from a hygienic trip to Mexico.

The next Congress of French Scientific Societies will take place in Paris. The first general meeting will be held in the Sorbonne on April 4, 1893.
Notes and Queries.

The Dietetic Treatment of Obesity.—Mr. W. Towers-Smith, M. R. C. S., England, in a paper read before the Medico-Chirurgical Society of Edinburgh, March 22, 1892 (Edinburgh Medical Journal, October), gives the following diet charts:

**DIET FOR AN EXTREME CASE.**

**FIRST PERIOD, FOURTEEN DAYS.**

**Breakfast:** Tea or coffee, with saccharin if desired in lieu of sugar; bread or biscuits made from soya bean, two ounces; grilled white fish or red meat, kidneys.

**Lunch:** Cut from joint of beef or mutton, taking no fat, and one helping of green vegetables, avoiding only peas, beans, and all roots; soya bread or biscuit, one ounce.

**Dinner:** Clear soup, white fish, red meat, green vegetables as at lunch; soya bread or biscuit, one ounce.

**DRINK.**

_First thing on waking:_ Tumbler of hot water with slice of lemon. 11 a.m., cup of bovril or clear soup.

_Lunch:_ Two glasses of claret or one ounce of whisky with potash water. 5 p.m., cup of bovril or clear soup.

_Dinner:_ Two glasses of still hock or claret, or whisky and potash.

_Bedtime:_ Cup of bovril or clear soup. Mustard, pepper, salt, Harvey’s sauce, may be taken.

**SECOND PERIOD, TWENTY-ONE DAYS.**

**Additions to No. 1:** Oysters, tongue, stewed fruit, with saccharin; poultry, game.

**THIRD PERIOD, THIRTY-ONE DAYS.**

**Additions to No. 2:** Toast in place of soya bread for each meal, two ounces; savory jellies, aspic or prawns, plovers’ eggs, jelly.

**Dessert:** A small quantity of fruit; blue-mould Dorset cheese.

Suppose a case, twenty stones, requiring reduction four stones. The above diet will, provided a large amount of liquid be taken in the sixty-six days, be sufficient. A return to usual diet may be resumed. The rise will be gradual, and ten days’ resumption of either No. 1 or No. 2 periods, three or four times per annum, will be amply sufficient to regulate weight and bulk in future.

A moderate amount of exercise proves useful. In dealing with milder cases, commence with No. 2, or even 3, when an equally satisfactory result may be obtained.

Hours of meals must be regulated by usual habits of each patient, and it may be also useful to say that nearly all cases require variation of rules as to diet, though the principle remains the same.

**Specimen Diet Chart for Fourteen Days.**

This diet sheet is arranged in accordance with usual habits and family history as to obesity, and must be strictly confined to personal use.

7 A.M.: Sip slowly a tumbler of hot water with lemon juice.

9 A.M., _Breakfast:_ Two cups of tea or coffee without sugar or milk, taking saccharin if needed; one ounce of soya bread or biscuit; grilled white fish, steak, chop, kidneys.

11 A.M.: Tumbler of hot bovril or clear soup.

1:30 P.M., _Lunch:_ Cut from joint of beef or mutton, with one helping of either cabbage, spinach, tomatoes, asparagus, French beans, plain lettuce, or watercress; one ounce of soya bread or biscuit.

5 P.M., _Afternoon Tea:_ Cup of tea a la Russe, or cup of bovril.

7:30 P.M., _Dinner:_ Clear soup, white fish, red meat, vegetables as at lunch; one ounce of soya bread or biscuit.

_Bedtime:_ Tumbler of hot bovril or clear soup.

1. All food should be plainly cooked (grilled for preference), no fat, skin, or rich gravy should be taken.

2. Drink claret, still hock, burgundy, Scotch whisky, and potash water.

3. Exercise—a moderate amount of walking should be done daily.

4. Condiments—mushroom ketchup, Worcester and anchovy sauce, mustard, pepper, and salt may be taken.

**THE MEDICAL CAREER AND HAPPINESS IN LIFE.**—Among the usual introductory addresses at the opening of the British Medical Schools, that of Dr. W. H. Broadbent at Owens College, Manchester, discusses the intellectual interest of the study and practice of medicine, and finds therein the true source of happiness in the pursuit of the medical career. It is the same thought as that followed in a previous editorial (August 11th) on “Medicine as a Liberal Profession.”

Dr. Broadbent asks: What are the conditions of happiness in a man's life, and how far are these satisfied by a medical career? To a certain degree these conditions lie in the satisfaction of the ordinary wants, the enjoyment of the simpler comforts and freedom from care for the future of one’s self and one’s family. In this particular the medical man, though not preeminently fortunate, at least enjoys a considerable degree of comfort and security. Another element of happiness is the consciousness and the prospect of advancement in life, and of this the medical man enjoys a large measure. His early life is among the poor, with but little pecuniary remuneration. He is presently brought in contact with all classes of the community; he gains fees and he gains friends, and his friends are not confined to his contemporaries in age, but are of all ages and of both
sexes, as well as of all classes and pursuits. Then there is the consciousness of doing good, the pleasure of relieving suffering, the satisfaction of saving life, the gratitude (not always vouchsafed) of patients. But these latter are imponderables—too sacred things to be cast in the balance.

What, then, is it, which, to those who are mentally and morally fitted for it and who enter it from genuine inclination, makes the medical profession the happiest career a man can choose? For such it really is. To this he answers, first and foremost, the opportunity for free and continuous exercise of the intellectual faculties. With the elevation of the race have been developed intellectual appetites. There is a hunger and thirst after knowledge, and a passionate desire for achievement, and the pleasure and satisfaction attending the attainment and employment of knowledge are as much higher and more durable than the gratification of the senses as mind is higher than body, as the intellectual operations are superior to sensation.

All the sciences are laid under contribution by medicine. As you master the principles of chemical structure and affinity, as you come to understand the relation between chemical action and the absorption or evolution of energy, thermal, electrical, and nervous, your ideas are enlarged, your imagination is excited, and the intellectual interest is awakened, which is gratified at each further step you take, but never satisfied.

A step further, and the interest of your work increases. Pathology deals with the deviations from the normal physiology, and with the results of such deviations on the structures and organs of the body, that is, morbid anatomy. In disease the same processes are at work as in health; there are no new laws, but only new conditions. From symptoms we read backward to causes which have disturbed the harmony of the economy and onward to effects which result in the readjustment of the organism to its surroundings or in its ultimate destruction. What we call symptoms are not all simply the indications and effects of morbid processes to be repressed or corrected; they are frequently only stages in the reaction by which the system recovers its balance. The very business of our lives is the solution of intellectual problems of the most interesting character. On the large scale we see the working out of general laws, the causation, genesis, and spread of disease affecting populations, the influence of heredity or climate, of modes of life. We note the vindication of the moral principles of right and wrong, the slow working of God's mill, which grinds exceeding small, as there are unrolled before us the effects of self-indulgence and of self-restraint.

And the profession of medicine not only offers constantly increasing subjects of intellectual interest, it also affords continuous work, a factor which it is impossible to overestimate as an element of happiness.

As a motto for medical students Dr. Broadbent suggests the exhortation of Prof. Huxley in one of his lay sermons: "Learn what is true, in order that you may do what is right." Boston Medical and Surgical Journal.

Shall Success in Therapeutics Be Imperiled by Ethical Considerations?—I have read and weighed the contents of the letter in your issue of December 19, 1891, on this subject: Shall Success in Therapeutics Be Imperiled by Ethical conclusions? That certain points in this letter have made a profound impression upon me is the main reason why I now address you, and respectfully ask that my letter be published in the columns of the Journal in vindication of the honorable standing to which all good and true practitioners of medicine aspire.

Dr. Dodge states very clearly a point that is now appealing to every progressive physician—that in these days of advancement in the manufacture of pharmaceutical products we should no longer be confused, as were our forefathers, to prescribing drugs in their crude form, since there are to-day thoroughly attested remedies in palatable form which our patients can take without repugnance and with credit.

Now, while the Code of Ethics is an admirable exponent of the tenets which are acceptable to the great body of practitioners in our country, yet it is at least a question open to discussion whether there are not some points
which in our progressive age might be reconsidered and revised. And I would suggest as one subject for discussion, the question of the approbation and recommendation of certain proprietary articles which are in almost daily use by very many of our ablest practitioners. Why should those preparations be condemned simply because their manufacturers are protected under a registered trade-mark? Is it not perfectly legitimate for our medical societies to elect committees to be judges of the therapeutical value of tried proprietary preparations? And could not their recommendations also be secured by their indorsement:

1. In didactic and clinical lectures and private instruction given to medical students;
2. In original articles acceptable to the editors of recognized journals; and
3. In standard medical works?

I address you particularly on this subject for the reason that the readers of your journal have carefully observed the fearless manner in which you and your able associates have defended the worthy against the unworthy, and given justice where justice was due. We have also seen that your journal has reviewed and commended works by others than medical writers. I have in mind the fact that the very excellent work on the therapeutical application of coca erythroxylin by Angelo Mariani, of Paris, France, the proprietor of the world-renowned Vin Mariani, was favorably reviewed in your journal.—William H. Hawkes, M.D., New York Medical Journal.

Twenty-five Cases of Extermination of the Uterus for Cancer: A Consideration of Ultimate Results.—Dr. Charles A. L. Reed, of Cincinnati, presented to the recent meeting of the American Association of Obstetricians and Gynecologists a report of twenty-five cases of complete vaginal extirpation of the womb for cancer, with only two primary deaths—one from shock and one from iodoform poisoning. Of the twenty-five operated upon, but fourteen were of more than two years standing, and hence were all that could be discussed with reference to their ultimate results. These fourteen were divisible into two classes of seven each, viz., those in which the disease had existed for more than six months before the operation, and those in which it had existed for less than six months before the operation. Of the first class, i.e., those of more than six months (an average of 10+-months) previous duration, all were dead; of the second class, i.e., those of less than six months (an average of 4+-months) previous duration, only one has since died. One of the recoveries is of more than five years duration. The conclusion from these figures is that cases of cancer of the uterus ought to be remanded for operation as soon as diagnosed. Dr. Reed looks upon total extirpation as the only operation to be advised or practiced in these cases, the primary mortality from which, in experienced hands, varies from five to eight per cent.

In the New York Medical Record, November 19th, Dr. Kaufman reports the following case: "On the 27th of this month I delivered Mrs. M. B. (a primipara, aged seventeen, strong and robust) in her seventh month of pregnancy, of a male child. The labor was rather tedious, and the child was born asphyxiated. On introducing my finger into the child's mouth a sensation of teeth was imparted to it from the upper and lower jaw. I did not pay much attention to this at the time, being occupied with the resuscitation of the child, in which I succeeded. The next day, finding that the child refused to take the breast, I examined its mouth, and to my utter astonishment found a full set of teeth in the upper and lower maxillae. The mother, on being told of this, remarked that she had dreamed it the night before."

The California Medical Record reports a case even as remarkable, but nearly seventy-five years existing between their respective ages: "David Southerland, of Seymour, Ind., a hearty man of seventy-four years, shed his last tooth several years ago. Recently he has just finished cutting his third complete set of teeth."

Doctors of Dentistry in Germany.—Several American dentists in Germany have been fined by the courts for using the title
"Doctor." The only titles of "Doctor" recognized in the Empire are "Doctor of Medicine," "Doctor of Law," "Doctor of Theology," and "Doctor of Philosophy." It has been held by the courts that any one practicing as dentist and using the title "Doctor," although he may possess such a diploma as Doctor of Theology, implies that he is a Doctor of Medicine, thus misleading the public. This will prevent those dentists holding the D.D.S. or D.M.D. diplomas calling themselves "Doctor."

Editors American Practitioner and News:  

GENTLEMEN: Permit me to state through your columns that the committee on membership of the American Pharmaceutical Association is anxious to present at the Chicago meeting next August a long list of names of reputable pharmacists of the United States and Canada. Blank applications and full information regarding fees, benefits of becoming a member, etc., can be obtained by addressing Dr. H. M. Whelpley, Chairman of the Committee, 2342 Albion Place, St. Louis, Mo.

A Close Call.—Mrs. Sharpe: "See here, Robert! What are all these red, white, and blue disks I found in your coat pocket?"

Dr. S. (Professor of Histology, etc.): "Oh? Why—those—are—that is—I use chi—I mean disks—to illustrate my lecture on the blood. You see, the white ones represent the white corpuscles, and the red ones the red corpuscles of the blood."

Mrs. S.: "And what do the blue ones represent?"

Dr. S.: "The—blue—ones? Oh! yes—H'm—Why they represent the corpuscles of the venous blood."—The Medical Fortnightly.

A New Professorship in Jefferson Medical College.—At a meeting of the Board of Trustees, held on Wednesday, November 30, 1892, Dr. G. E. de Schweinitz was, on the unanimous recommendation of the Faculty, elected Clinical Professor of Ophthalmology in the Jefferson Medical College. At the time of election Dr. de Schweinitz was Professor of Ophthalmology in the Philadelphia Polyclinic and Lecturer on Medical Ophthalmoscopy in the University of Pennsylvania.

SPECIAL NOTICES.

We call the attention of our readers to the advertisement of the Robinson-Petett Co., Louisville, Ky., which will be found on another page of this issue. This house was established fifty years ago, and enjoys a widespread reputation as manufacturers of high character. We do not hesitate to endorse their preparations as being all they claim for them.

ALEX. M. BLIGH, M.R.C.S. Eng., etc., Liverpool, England, says: S. H. Kennedy's Extract of Pinus Canadensis is an invaluable remedy for most diseases of the mucous surfaces, especially of the throat, and indeed the whole intestinal mucous membrane. In throat affections, relaxed uvula, chronic laryngitis, assuming the form of aphonia clericorum, to which teachers, singers, and clergymen are subject, I have found its administration, both internally and as a gargle, most useful. I have considerable experience of its efficacy in clergymen, and find it invaluable in neuralgia of larynx.

TRIONAL.—Boettiger (Berl. Wochenschrift, October 15, 1892) has used Trional in 75 cases in Professor Hitzig's clinic. The single evening dose is from 1 to 4 gns. (1 to 2 gns. was most used.) It was occasionally given in divided doses during the day. Any systematic treatment was not interrupted. The cases fall into three groups: (1) Simple sleeplessness occurring in functional or organic nervous disease. Uninterrupted and mostly deep sleep occurred in from 15 to 45 minutes. In only one case was any giddiness or other ill effect noted on the following day. In some cases the drug was used every evening for two or three weeks without losing its effect. (2) Sleeplessness with bodily pain. Here the results were not nearly so good. In one case referred to of severe hypochondriasis the result was variable according as there was pain. As regards morphine and cocaine habits, the author, unlike Schauen (Epitome, August 20, 1892, par. 166) found it useful in one case. (3) The third group, including patients with mental disease, is divided into two parts, according as the sleeplessness was accompanied by moderate or severe mental excitement, etc. In only 2 of 22 cases of the former class was there no hypnotic action. The drug had no effect on the mental condition. In the second class the results were variable. Whether larger doses would have been more efficient is doubtful; unpleasant results have been noted after such larger doses. The author refers to 5 cases of mental disease with marked excitement, in which fractional doses were given with the best results, but he adds that the number of the cases was too small. The drug was given by the rectum, usually in 2 g. doses in 16 cases. It acted as promptly and effectively as when given by the mouth. The drug is without effect in sleeplessness due to bodily pain, in acute alcoholism, and in cases of great mental excitement and motor restlessness. Trional has a more marked and prompt action than chloralhydrate, 2 g. of the former corresponding to 3 or 4 g. of the latter. Amylenhydrate approaches nearer to Trional in its effects. In some cases Trional may cutakeep the use of hyoscine, yet the subeutaneous injection of the latter is preferable in great mental excitement.—British Medical Journal, Nov. 5, 1892.
But in dealing with spiritual things common mortals are sometimes left in the background. His etiology of chronic diseases is very comprehensive. He regarded all chronic diseases to be due to itch, syphilis, and sycosis; but about seven eighths of the whole were due to the first or psora. We will name a few of them as a curiosity: Nervous debility, hysteria, hypochondria, mania, melancholia, imbecility, madness, epilepsy, convulsions of all sorts, rickets, scoliosis and kyphosis, cancers, fungus hematoides, malignant growths, gout, hemorrheids, jaundice, cyanosis, dropsy, amenorrhea, hemorrhage from the stomach, nose, lungs, bladder, and womb, asthma, ulceration of the lungs, impotence and barrenness, megrim, deafness, cataract, amaurosis, urinary calculus, paralysis, defects of the senses and pains of thousands of kinds. He remarks that any one free from psora never has inflammation of the lungs.

Of course, if all these diseases proceed from the itch, the remedy to be used in their treatment should be sulphur.

The diseases treated by chalk are, obstinate constipation, caries of the bones, difficulty in learning to walk, nasal polypus, chlorosis, urinary calculus, agues, gout, nodostics, diarrhoea, sterility, drunkenness, tenia, milk crust, goitre, melancholy, fistula-lachrymalis, hysteria, consumption, warts, etc.

Jahr must have made a mistake in recommending chalk, both in diarrhoea and constipation. He may have spiritualized the remedy a little higher in treating obstinate constipation. Diarrhoea might be cured by using proper doses, but it would be wonderful if chalk in infinitesimal doses cured any other diseases mentioned.

It was obligatory upon the followers of Hahnemann, before they obtained license to
practice, to take an iron-clad oath, as well as make a profession of faith. This was as follows:

"My hand upon my conscience and my eyes upturned to heaven, I embrace homeopathy, and declare, after having examined attentively and impartially the various systems of medicine, that I acknowledge the doctrine of Hahnemann to be the only true medical doctrine."

I only have space to give a few sentences of the long oath which followed the profession of faith. It is as follows:

"By our Savior Jesus Christ, who suffered and died for us, redeeming our sins by his precious blood, and by virtue of his pains obtaining for us eternal felicity; by our Divine Redeemer, whom I ought to imitate as far as human weakness permits, I swear 'To redeem the sufferings of the sick by the preventive sufferings of pure experimentation, which I shall make myself, or by persons committed to the like charity. (2) Not to treat patients but by medicaments whose effects have been well proved, which are in the domain of pure homeopathy, as I have acknowledged and declared in my profession of faith. (4) To propagate the knowledge of the principles of pure homeopathy by all lawful means in my power.'"

It is to be presumed that Hahnemann was of the opinion that if a religious-bound oath was administered to his followers it would be more closely observed. If it was sufficient to hold them to strict observance in his time, it does not seem to have that effect in our day. I doubt very much if a claimed follower of his can now be found who adheres strictly to his precepts.

In these sketches I have dwelt at considerable length on the dogma of homeopathy, more particularly so because it is about the only medical heresy now extant in opposition to the principles of scientific medicine, and these disciples in the last half century have dwindled down, comparatively, to a small number. Fifty years ago homeopathy was quite prevalent in some sections of Europe, more especially England, Germany, and Austria, but now it seems its followers are pretty well thinned out in those countries. We now find more of them in the United States than elsewhere, and we might claim, with some degree of certainty, that but few of them, as before remarked, hold strictly to the tenets of homeopathy. From what can be gathered from their practice, it is doubtful if many of them still use the high potency remedies. If we read that able homeopathic journal, the New York Medical Times, we will be convinced of the fact that a great modification in the plan of treatment is taking place among them. It is quite a conservative journal, and I believe from its tone it would like to see a union between our profession and the homeopathic.

It was hoped by our profession last year, when the homeopaths held their "International Congress," that some expression would be made as to the true tenets of homeopathy, so we could get a consensus of opinion as to what is the present status of homeopathic practice, but it seems not a word was said on the subject, in fact, but little was said in regard to professional matters. I think there was no official report made of their transactions, except what we got through reporters in secular journals. As an evidence that homeopaths are abandoning the Hahnemann doctrine, some eight or ten years ago many physicians in New York formed an agreement to consult with them. Of course no regular physician would sacrifice his honor so much as to meet a high potency homeopathist and agree with him to administer to a patient such nonsensical nothings. The profession at large could not understand why our men could meet them in consultation, and many charged it both to cupidity and dishonesty. But however much they were actuated by the first, I think they were relieved from the latter charge, to a great extent, by their consultees agreeing with them. At all events this matter produced quite a split among New York doctors.

Of all the known sects of medicine, from the days of Hippocrates down to the present, I think it requires more credulity on the part of the people to believe in the efficacy of Hahnemann's plan of treatment than that of any of the whole lot, if we except, perhaps, that small sect claiming to be Christian Scientists, or faith curers. The only reasonable way we can account for any success they may have in
the treatment of disease is their most excellent dietetic plan, together with the assurance given the mind of the patient, which we might materially profit by in many cases, if properly observed.

While enumerating the various sects and systems which have from time to time made their appearance in medical history, I omitted to name what is known as the root or herb doctor. I will only speak of one, Dr. Carter, late of Kentucky.

The doctor, in a preface to his book, says he was born in Virginia, his mother being of Indian descent, which fact may be placed to his credit as an inherent force in the acquirement of the knowledge of medicine. He claimed to practice mainly with roots, herbs, and barks. He practiced in Kentucky over sixty years ago. In examining his little work I find now and then that he used in some cases other substances aside from roots, herbs, etc., and owing to their peculiar character I thought I would, as a curiosity, copy a few samples. In the treatment of bloody flux, when other things failed, he resorted to dried hog dung boiled in milk; and in bad cases, when he failed, he took the maw of a rabbit, dried and powdered. In pleurisy, when the ordinary remedies did no good, he made a tea of dried cat dung. In consumption he had several remedies outside of the herb plan; part of the diet consisted of mare's milk and dog fat. These had to be taken every day. The last resort in the way of medication was to burn dry cow dung to ashes and make a weak lye, and drink it now and then.

In the management of negro poison he found new milk, sheep saffron, and goose dung, boiled together, of great benefit. The compound, however, had to be taken on an empty stomach. In children with hives or croup, he has found that breast milk mixed with blood obtained by scarifying between the shoulders, and given to the patient, will drive out the hives immediately.

His most reliable remedy for dysmenorrhea was to get the largest grown pullet you can find, that never laid an egg, pick her without scalding, beat her to pieces, and boil her well, and let the patient drink this about the change. He says this is wonderful.

His directions to the grannoy in child-birth are so peculiar and new to us I take the liberty of copying the whole of them. These are "remedies to hasten labor and fetch deliverance when needed. Take eel's liver and dry it, beat it to a powder, and give the woman in labor to drink in spirits. This is a speedy remedy; or beat a rattlesnake's rattles fine and give to one that is in labor; this is wonderful to hasten labor; or dip a linen cloth in the juice of parsley and put up the privates; it causes the deliverance of a dead child. This is also good to cleanse the womb of ill humors, etc. Pillipodium, steeped and beaten, and applied to the feet of a woman in travail bringeth away the child, dead or alive; the ashes of an ass's hoof mixed with oil and the privates anointed is a wonderful remedy. The juice of vervain, or the decoction, given to a woman in travail, causeth speedy deliverance; or a dram of myrrh, given in powder to drink in any convenient liquor, bringeth away the child dead or alive; or give a woman to drink another woman's milk, fetches on speedy deliverance; or boil mugwort in water till it becomes a poultice, apply it hot to the thighs of a woman with child, it causeth both births to come away, but if it tarries long it will bring the womb also; dittany taken invariably causeth deliverance."

From this quotation it would seem that he had no lack of remedies. For hollow sores in the breast he prescribed goat's dung mixed with honey; this soon eases them and cleans out the fist and heals them.

"Remedy for Phthisic: Take a piece of indigo, size of a pea, in a little water, and in an hour after take a teaspoonful of saltpeter the same way. This will relieve instantly. I have known children cured by drinking the water of sour crout in desperate cases.

"For the Cramp Colic: Scrape inside of a pipe and give the patient to drink; or take a piece of charcoal, as large as a bullet, and beat it fine and give it in a little water; or take a young shoot and cut it open as soon as you can and swallow the gall.

"For Flooding: Put on your husband's shirt, warm off his back. I have known this to do wonders; or take a handful of service
bark and make a strong tea of this and drink according as you need. I have never known this to fail.

"For the Gout, Rheumatism, Cramp, etc.: Take a fat young dog and kill him, scald him like a pig, then make a hole in one of his sides, then take out his guts and put in his belly two hand-ful of nettle, two ounces of brimstone, about a dozen eggs, and four ounces of turpentine, well mixed together, then sew up his belly close, and roast him; save the oil and anoint the parts and weak limbs as hot as you can bear by the fire.

"For Weak Nerves, etc.: Kill the fattest dog you can find in March or April, scald him and take out his guts, fill up his belly with a pint of red pepper, a pint of red fishing worms, the bark of sa-safras roots and water frogs, and sew up his belly close again, roast him, and save the drippings to anoint for sores, gouts, burns, weak nerves, etc.

"For Water Brash: Take a little stick and split one end, put two oak leaves in the split, then cut them round, then put them in your mouth as far as you can well suffer, and hold the stick fast between your teeth, abundance of water will run off the stomach; then wash the leaves in water and put them back again; do this as often as you see fit. If you do this before you eat it will take the water off the stomach and keep digestion.

"For White Specks in the Eye: When you go to bed put some ear wax on the speck. This has cured many.

"For Bilious Fever: Get a good chance of yellow dogwood and boil it well, then strain it, then tie up a good chance of cow dung and boil it well, then strain that and put them together, then boil to a quart, then put in a tablespoonful of salt peter, and bottle it. Give a tablespoonful three times a day."

In nearly fifty years' practice I have met some ignorant doctors, but have never met with one who prescribed the excrement of any animal for internal use, and only one that prescribed the excrement for external application. I was sent for many years ago to see a man suffering from crysipelas of the leg, due to a wound. I met the attending physician, who had applied a poultice prepared from cow dung. He had heard of its being good in such cases, and wished to see an expression of its virtues. Sheep saffron tea used to be a very popular remedy with old ladies in treating measles, but I suppose it is now nearly obsolete, as I have not heard of its being used for many years.

Many centuries ago a number of the ornamental stones and some of those used in the arts were regarded as possessing remedial virtues by the old-time physicians. I will only name a few of them. The stone called balsam, of the nature of the ruby, was said to restrain fury, wrath, and lust. The malachite protected infants from dangers and infirmities, and cured them of convulsions. The coral possessed many virtues; in the form of an amulet it drove away fears and kept men from enchantments, poisoning, epilepsies, and the insuffling of the devil; also protected them against thunder, tempests, and all manner of perils. By giving new-born children ten grains in their mother's milk, it protected them against epilepsy all the days of their life. It was also recommended for vomiting and all fluxes of the belly. The gagate, or stone coal, by wearing it, secures man from nocturnal fears, from incubus or nightmare, and from evil spirits; if drunk it will show whether a maid have her virginity or no. The aetite is good to facilitate labor by binding it to the left thigh. Its attractive force is so great that if it is not removed upon the deliverance of the child, it will produce prolapsus of the womb. In one case reported, by neglect of removal one patient lost her life by prolapsus. It is also reported that if bound to the arm of a gravid woman, that it will hinder abortion and prevent prolapsus uteri. It will be seen from this that it attracts both upward and downward. It also possessed the power of procuring love, increasing riches, and making men victorious. The leadstone hematite is good for headache, convulsions, and poisoning; also facilitates delivery, and procureth love between man and wife.

Lapis Lunicis: It is said if its powder be drunk in some convenient liquor, it will prevent lustful dreams and witchcraft.

There is another so-called system of med-
icine of quite recent date, but so far having but few disciples, which I will merely allude to. It is termed the "Dosimetric" system, inaugurated by Dr. Burggreave, of Ghent University. It is claimed to be based on physiology and clinical experiment. The medicines are in the form of globules or granules, and composed mainly of active medicines, but in small quantities, ranging from one tenth milligram up to a centigram. These doses or granules are given as often as fifteen minutes intervals, and kept up until the system gets under their influence, and then it is aimed to keep up this effect regularly until the disease is aborted or relieved. The followers of Burggreave claim under this plan to jugulate some of the more serious diseases, as typhoid fever, diphtheria, etc.

There seems to be some plausibility in the so-called Dosimetric plan. Dr. Burggreave is the author of several works, and a monthly journal advocating the Dosimetric system is published in New York.

Now, gentlemen, although I have read to you quite a lengthy paper on the history of medicine, with some accounts of its many sects, vagaries, and absurdities, I hope I have not wearied your patience, as the subject is one of great interest to all medical men as well as a matter of knowledge we all should possess.

Bibliography: P. Y. Renouard's History of Medicine; T. Y. Simpson on Homeopathy; Aristotle, Lapidary, by Thomas Nichols, published in 1652; The work of Dr. Richard Carter. I have made many quotations from these authors.

GROSS—PRESTON—VIRCHOW.
A Reminiscence.

BY LYMAN BEECHER TODD, M. D.

The following was read at a recent meeting of the Lexington and Fayette County Medical Society:

The Kentucky State Medical Society met in Lexington in 1880. Among the social pleasures which rendered that meeting enjoyable and memorable was the banquet given by the citizens and physicians of Lexington, at the Phoenix Hotel, at which I had the honor to preside. I recall an incident of the evening which greatly impressed me at the time, and which I am sure is cherished with much pleasure by many others who were present on that occasion. The incident referred to links in a most pleasant way the names of three very eminent and widely known men, two of whom, life-long and devoted friends, have since passed away, and the survivor is to-day the most illustrious living physician, whose name fills the world with fame. Among those whose eloquence at that banquet charmed and thrilled us was the courtly, learned, gifted, and accomplished lawyer, statesman, orator, and diplomat, Hon. William Preston.

He had accepted an invitation to respond to the toast: The Law, twin sister of Medicine. A man of noble physique and commanding and engaging presence, his voice strong, rich, and musical, which was attuned to easy and graceful gestures, Mr. Preston arose and was greeted by an audience and an applause which might well have stimulated the eloquence of a Pitt or a Clay or a Prentiss. Just at this moment a pause, an interruption occurred, caused by a telegram brought to me from the first President of the Kentucky State Medical Society, the Nestor, the Monarch of American Surgery, which I then read to the assembled guests, all standing:

Greetings and blessings to the Kentucky State Medical Society, now in session in Lexington, Ky.

SAMUEL D. GROSS, Philadelphia.

This seemed to fire Mr. Preston with a magical enthusiasm, almost inspiration. Quickly seizing his glass, and raising it, "I drink," he said, "gentlemen, to Dr. Gross, your immortal master and my own beloved friend. God bless him!"

The incident then related in his noble and well chosen words, so eloquently spoken that evening, I now recall, and tell you from my memory as correctly as I could do from notes taken at the time, and still preserved:

"Dr. Gros-s," he said, "and I lived neighbors, very near together in the city of Louisville for twenty-eight years. He was my early, my intimate, my trusted friend. He also was my kind, skillful, and ever-faithful family physician. He was in my house in times of joy and
in seasons of sorrow. The large practice which came to him, the success which he achieved, and the eminence to which he attained, these to my heart were the cause of especial joy and delight. Our paths of life diverged. He went to the beautiful and cultured city of Philadelphia to pursue, and there to terminate, a most noble and honorable career, and I came to this delightful Lexington to quietly pass the remainder of my days.

"And how well do I remember, as often times I returned to my home in the small hours of the morning from the club, banquet, or a party, to have seen the lamp of that industrious, great physician brightly burning in his study; when then I knew that I was wasting precious time and impairing manhood's strength, he was plodding upward, studying and writing to prevent and ameliorate the pains, the ills, and sorrows of his race, and carving in the Temple of Fame an immortal name!

"Some years afterward, during my absence abroad as ambassador from the United States to the Court of Spain, I had the pleasure of attending an International Diplomatic Banquet at Berlin, which occasion greatly and signaly honored my country by thereby celebrating the Fourth Day of July. I, with others, of course, was expected to acknowledge this distinguished compliment. In my remarks I mentioned Irving, Prescott, and Longfellow. I referred to Clay, Webster, and Calhoun, and I did not forget Rush, Mott, Physic, McDowell, Dudley, and Gross. On resuming my seat, a stranger's hand was extended and most warmly grasped my own in cordial congratulation; he presented me at the same time his card, with an invitation to dine with him the next evening. You may not imagine my surprise and my gratification when I read upon that card the name 'Virchow, Germany.' After 'the feast of reason and flow of soul,' and after delightfully lingering over the 'walnuts and wine,' he invited me into his library. He then took from the shelves a volume, which showed that it had been well used, and placing it upon the table, he laid his hand upon it, and gently and thoughtfully looking into my face, said, 'Mr. Preston, to this book, and to its author, more than to any others, or possibly more than to all others combined, am I indebted for good, if any, that I have done in this world.' The title of that volume was, A Treatise on Pathological Anatomy. On the fly-leaf thereof I recognized the very familiar autograph, 'I am your friend, Samuel D. Gross.'"

LEXINGTON, KY.

THE PLASTER OF PARIS JACKET APPLIED BY THE HAMMOCK METHOD IN POTTS' DISEASE OF THE SPINE.*

BY SAMUEL E. MILLIKEN, M. D.,
Lecturer on Surgery in the New York Polytechnic, etc.

The conviction that the protection of a diseased joint is best accomplished by fixation or immobilization caused me to choose this subject for my paper. I might dwell at length upon the efficient mechanism of the many so-called extension splints while under the physician's own eye, only to get out of order when the patient has been placed under the care of the parents or a nurse. They often return for observation with the apparatus exerting only the part of a protection without extension. The majority of extension splints for the hip only protect the joint, but do not limit flexion to any great extent. Although a high shoe may be employed and the splint made so as to extend well beyond the foot, continuous extension is almost impossible when the patient is allowed to go about, at the same time flexion to a greater or less degree is inevitable. The above principle is cited only to make more strong a matter which has caused me to consider and practice a mode of applying the plaster of Paris jacket in Pott's disease, which has proven very serviceable in children who resist from fear the suspension from the chin and axilla by means of the tripod.

When the idea of extension began to occupy the medical and surgical minds so fully it was the plan to apply it to every spinal case, going so far as to cut the plaster of Paris cast into segments that the extension screws might be permitted to work. That once much-lauded principle has been abandoned entirely in the treatment, but the method of suspending patients for the

* Read by request by title before the Kentucky State Medical Society, May 6, 1892.
application of a jacket is largely practiced by
our general and orthopedic surgeons to-day.
Before describing the hammock method, which
is not new, I wish to say that it is only in-
tended for children, as they have such a dread
of being suspended, causing them to resist
with all their might, and in so doing many
times prevent the application of a jacket which
will press uniformly at all points.

The younger the subject the greater will be
the fear and resistance. The expense and trouble
of obtaining the proper armamentarium for the
suspension method is an obstacle which the
general practitioner easily abates by employing the
hammock.

Hammock Method. For the application of the
plaster of Paris jacket the body should first
be covered with a skin-fitting thin shirt, pre-
ferably seamless. The plaster bandages should
be made of coarse woven erinolin, four inches
wide and from three to four yards long; the
plaster rubbed into them as the bandage is
being rolled. It is important to use the best
dental plaster, and know that it was free from
moisture when the bandages were made. If
they be not manufactured for each case, it is
of the greatest importance that on the day to
be employed they should be placed in an oven
and baked. By this precaution rapid harden-
ing of the plaster will be insured, and the addi-
tion of salt will not be required to hasten the
process.

Apparatus. By means of a strip of ordinary
domestic four feet long and six or eight inches
broad, stretched between the backs of two or-
dinary chairs, the child is placed either in the
prone or supine position, with an assistant to hold
its arms and another its lower extremities. The
weight of each assistant is quite sufficient to
prevent the tilting of the chairs, and the ham-
mock is complete.

All the bony prominences, such as the spi-
nous processes over the kyphosis and the crests
of the ilia, are protected from pressure by one
or two thicknesses of blanket before any plaster
is applied. Each bandage is immersed in a
basin of water until completely saturated, that
no lumps may be present or delay entailed
while being applied. The first roll should be-
gin either at the pelvis or axilla, and from four
to six thicknesses applied uniformly, which, if
allowed to harden without the patient being
disturbed, will be quite sufficient support.

The minimum amount of plaster will insure
the greatest comfort for the wearer of the
jacket. The plaster having become hard, the
strip of muslin may be cut off even with the
plaster edges, or, by having been placed inside
the seamless shirt, it can be entirely with-
drawn.

The plaster is now cut out under the
arms and over the thighs, that too much
pressure may not be exerted in the axillæ,
and the patient be permitted to sit without
discomfort.

The jacket may be worn without discomfort
for from one to six months, depending on the
weather and the absence or presence of foreign
bodies, such as coins, buttons, and the like,
which are often a great source of annoyance in
producing excoriations.

Conclusion: The advantages of the hammock
over the suspension method are:
1. Cheapness.
2. Practicability.
3. Efficiency, by enabling us to get a perfect
cast of the body without resistance from the
child.

New York.

Societies.

LOUISVILLE SURGICAL SOCIETY.*

Stated Meeting, October 10, 1892, Dr. John G. Cecil,
Vice-President, in the chair.

Dr. W. C. Dugan: I simply present this patient
to show the result of an operation for fracture
of the patella. It is early yet to tell definitely
what the result is going to be, but there seems
to be a good bony union, and I believe he
will have perfect motion in the joint. Eight-


*Stenographically reported by C. C. Mapes, Louisville, Ky.
silk-worm gut. You will observe two or three fistulas still open.

One word concerning the anatomy of the muscles of the patella: It is usually stated in our books that the quadratus extensor or the triceps extensor is inserted into the patella. This is a mistake. By careful dissection the muscles can be removed, leaving the patella attached to the ligaments and serous capsule of the joint, showing that the muscles are not in reality attached. In the case above reported there was distension of the joint at time of operation, and he had much pain from this distension. He has suffered little or no pain since being operated upon. I went to see this case without my bone drill, and holes were made in the bone with a pair of barber's scissors. He has not had an untoward symptom, and I believe will make an uneventful recovery. I am decidedly in favor of the open method of treating these cases when there is much separation. If the fragments are in good position, that is, when the muscular aponeurosis is not torn, I do not consider it advisable.

Dr. A. M. Vance: I have never performed the operation of suturing the patella, but have assisted in several operations of the kind. I doubt very much if a bony union can be obtained in fracture of the patella without the operation advocated by Dr. Dugan, still I must say that very firm and unyielding union can be obtained by proper mechanical means if treatment is continued a sufficient length of time. I have several cases where a perfect limb functionally resulted; in fact, have never failed to get a very useful limb after this injury.

Dr. James Chenoweth: I have a specimen that I would like to show: It is an appendix vermiformis, removed two weeks ago last Friday from a man thirty-one years of age, farmer, who had always been in good health, a strong, athletic-looking subject. I saw him about a year and a half ago with a slight attack of catarrhal appendicitis, little or no fever, and not much pain. He stated to me then that he had two similar attacks two or three years before; he recovered from this attack, and I heard nothing of him until two weeks ago last Friday. That morning he came to town from the country feeling a little sick; did not eat any breakfast; suffering some pain in the right side. I saw him two hours afterward; he had gotten very much worse; suffering intense pain; cold, clammy perspiration; suffering a great deal from shock; pulse, 60 when normal, was then 82; temperature, 99.5° F.; abdomen slightly tympanitic even at that time. I thought he probably had perforation of the appendix, or it was on the verge of perforation, and had him sent to the Infirmary, advising immediate operation. Two hours after reaching Infirmary pulse was 106, temperature 101° F., still suffering intense pain; abdomen more distended, very tender, could hardly touch him at all on the right side. I operated on him at two o'clock, seven hours after the attack came on. I found the inte-tines greatly distended and very much reddened, showing evidences of peritonitis. The colon protruded as soon as the abdomen was opened; by following the colon down, without much difficulty I found the appendix low down in the pelvis, slightly attached to the walls, not very firm, and easily detached; it was brought up and found to be about the size of a finger, and three or four inches long. It had to be handled carefully to prevent rupture; it had not perforated, but was very much distended, and evidently on the verge of perforation. The appendix when removed contained two small fecal concretions. The patient was on the table about twelve minutes; pulse at the time about 60. He was very much nauseated, and vomited severely after the operation; no action of the bowels, and still considerable distension. By repeated enemata his bowels were started, the nausea subsided, and he seemed to be doing very well. The first night after operation temperature was 103° F., but as soon as his bowels began to act temperature went down to normal, running from 98.5° to 99° F. The stitches were removed on the eighth day, and union had taken place. On the ninth day there was a little discharge from the lower stitch, where some fluid had collected between the peritoneum and muscles. Temperature on the tenth day went up to 101° F. I made an examination and found a little discharge collected through the night; there was no inflammation of the skin and no tenderness in the right side; never had any pain after the operation. I opened
the lower part of the wound and found a little cavity filled with fluid; the peritoneum had united perfectly, leaving no tenderness and no induration. On the morning of the fourteenth day temperature (which had gone down after cleaning out this little accumulation to 99° F.) went up to 101° F.; he seemed rather restless and nervous, but talked in a very rational manner and felt quite well. About two hours afterward I had a telephone message to come to the Infirmary, as the man was unconscious. I went out immediately, found the patient in a comatose condition, gave him a hypodermatic injection of whisky; pulse about 150. He never fully regained consciousness, and died about 8:30 that night. He had been passing water in the natural way, and there was no occasion for using a catheter; but on my last visit to the Infirmary I introduced the catheter and drew off some urine; found it loaded with albumen, death being due evidently to uremia.

Dr. E. R. Palmer: Did you make a post-mortem, and were the kidneys ever examined?

Dr. Chenoweth: No post-mortem was made, and the kidneys were not examined.

Dr. Dugan: Do you think the nephritis was caused by the anesthetic? I have seen several cases of suppression following operation, but they came on within twenty-four hours, and every one after chloroform anesthia.

Dr. Chenoweth: I believe the man had nephritis before the operation. He became much cyanosed when taking chloroform. While he had never been sick much, I believe that the nausea was caused by some trouble with the kidneys. I never saw a wound do better, and the abdomen was perfectly flat on the first day after the operation.

Dr. Palmer: My idea of the case is that death was caused by kidney lesions; such conditions any man who examines much for life insurance will often recognize. It is very common to find bad kidneys in young men, and I believe in this case a defective kidney was the cause of death. Of course the exciting cause was the operation and the consequent shock.

Dr. Vance: I saw this patient in the emergency, and recognized the probable nature of the coma, and was very much interested in the case. It occurs to me that possibly this man may have had septic nephritis, that there may have been a septic inflammatory condition of the kidney. I think it would have been very interesting to have held a post-mortem on this case to determine whether it was ordinary nephritis or septic nephritis. This small accumulation of pus might have been sufficient, though he did not show marked evidence of sepsis generally. It is certainly a very interesting case, and one that proves to us the rightful procedure of always making a very thorough examination of the renal secretions whenever possible.

Dr. Palmer: Of course I am particularly interested in cases of renal lesions as a factor in fatal results, and those of us who are working strictly in that direction know how important it is to have a very careful analysis made of the urine; not simply a chemical albumen test, but a very careful examination of the sediment to try and determine if there be any trouble, and the nature and extent of it. But the point I want to make is, it does seem to me, and I have thought of it often, in this age of rapid advances of a more purely scientific nature in surgical work, that we do not insist upon enough post-mortem examinations. I do not see why every city should not have one or two men who are known as "Post-mortem Experts." I have seen a number of post-mortems where there was extensive degeneration of the liver, for instance, in which there was not a suspicion of liver complication during life, and consequently no treatment instituted for that organ. I believe, in the case reported by Dr. Chenoweth, if a post-mortem had been held it would have been found that the man had serious renal trouble, which probably existed prior to the operation for appendicitis.

Dr. Dugan: I had the pleasure of seeing this case on the fifth day after the operation with Dr. Chenoweth, and the patient was then suffering from nausea, otherwise he seemed to be doing very well; pulse about 78, and did not indicate sepsis. I am sure the patient died of uremic coma, as stated by Dr. Chenoweth. The question of coma after operation is one of great interest, especially as I have lost two patients recently from this cause, but the coma in
both instances came on immediately. *Post-mortem* revealed disease of the kidney in both cases, and neither of the patients had urine after the operation. I am sorry that Dr. Chenoweth's patient died, as it will go down as a fatal case of appendicitis, when the operation for this trouble was a complete success, the patient eventually dying from another cause.

Dr. J. M. Mathews: I think the doctor should be commended for the diagnosis he made. I have no doubt that in the country districts, and perhaps sometimes in the city, patients have been allowed to die with appendicitis (so-called biliary colic, passage of gall stones, etc.) without operation, when they might have been saved by surgical interference. In regard to the contents of the appendix in these cases: There is a popular impression existing, not only among the laity, but the profession, that it contains grape seed and other foreign bodies. Now, it always occurred to me that in the majority of cases the contents will be found to be fecal concretions. I notice Dr. Chenoweth in his report stated he found a fecal concretion.

Dr. Dugan: In this connection, I remember looking up the subject some time ago, and out of 252 cases of appendicitis reported by several pathologists, there were irritating bodies found in the appendix in 112; and out of this number there were 99 which contained fecal concretions or enteroliths, and in 13 there were found various kinds of fruit seed or some other foreign body. In the majority of cases I am quite sure there is no foreign body. The hobby of grape seed, blackberry seed, etc., is entirely a mistaken idea in my judgment.

Dr. Chenoweth: As to the cause of the trouble in this case, I think if you will examine the specimen you will find the opening into the bowel was very small, and probably the attacks he had before were simply produced by the appendix becoming distended by fecal matter. The concretions were not very hard. I think the irritation was caused by the distension, and then threatened gangrene from the pressure. As for uremic coma, I believe, as I look back on the case, that the man undoubtedly had disease of the kidneys prior to the attack of appendicitis for which the operation was performed, and believe that the kidneys were responsible for the way he acted under chloroform; he was very much cyanosed and nauseated, more than could be accounted for in any other way, at the time and after the operation. He had no septic symptoms at all as far as the wound was concerned; there was simply a small collection of fluid at the bottom of the wound between the peritoneum and muscles.

John G. Cecil, M.D., read the following paper on The Curette in Obstetric and Gynecological Practice:

"The curette, like many other surgical instruments, has experienced seasons of favor and of disfavor. At no time, however, as at the present, has its usefulness been as fully recognized. So much have the dangers attending the use of the instrument been magnified that unquestionably there yet lingers in the minds of many strong prejudices against it. Many, in fact most of the objections that justly obtained before the application of aseptic precautions are now no longer tenable. It can never be maintained that the use of the curette is entirely devoid of danger, but, hedged about with all the modern methods of preventing septic infection, it may be stoutly claimed that danger is reduced to a minimum in any case of whatever kind where its use is called for. So in any case where the indications are plain the most cautious and timid need scarcely hesitate in its application. It is hardly necessary to add that the use of this instrument in the hands of a bungler or careless manipulator is capable of doing incalculable harm, despite aseptic precautions, let them be never so thoroughly instituted. The good results that may be had are so manifold and great, and so far outweigh the dangers, that to enter a plea for a place for it in the armamentarium of the obstetrician or gynecologist would be a work of supercragation. When I say curette I do not confine my meaning to those bent wire affairs which have all along been regarded as harmless, and we might safely add almost useless, at least in gynecological practice, but to the modern improved instruments with cutting edges. The indications for the use of a dull or a sharp curette depend upon the exigencies of each
case, and must be left largely to the judgment of the operator. There is no doubt that much of the disfavor the curette has fallen into is due to the use of a dull instrument where a sharp one was demanded.

"Before referring to the special indications for the use of the curette (and this part of my subject alone would lengthen this paper beyond its intended limits) a brief consideration of the preparations and methods necessary to its proper and safe use will not be inappropriate.

"To begin with, curettage should be dignified by the name of an operation, and the antecedent preparations should be just as zealously carried out as those, for instance, for an abdominal section. Many untoward results have followed because the operator deemed it only necessary to place the patient in position, introduce an instrument (itself probably not clean), and scrape away some foreign body or adventitious growth. Concerning the technique of curettage, I can not do better than follow the suggestions of that most zealous advocate of the procedure, S. Pozzi, in his recent superb work on gynecology. The patient should have a full bath the evening or the morning of the operation. The rectum emptied by enema, the bladder by catheter, the external genitals thoroughly washed with soap and water, and afterward with a strong antiseptic solution, vaginal injections of sublimate solution 1 to 2,000 should be enjoined twice daily for several days prior to the operation. On the day of the operation three injections are to be given, the first two at intervals of an hour, the third at the very moment of the operation. It must be borne in mind that if bichloride of mercury is used for the douchings that gynecological patients will safely stand stronger solutions than obstetric cases. Should the cavity of the uterus need powerful disinfection, as in certain cases of gangrenous fibromata, intra-uterine cancer, with putrid fungosities, etc., it is advisable to extend the douchings into the cavity. There may exist a demand for continuous irrigation. If so, it is readily applied by means of the irrigating curettes or other devices. Though pain in many cases is not great, yet for the sake of thoroughness and control of the patient an anesthetic is demanded. The operation may be satisfactorily done in either the dorsal or lateral decubitus. The vaginal walls are separated and held apart by retractors or a suitable speculum in the hands of assistants. The first step of the operation is to fix the uterus with tenacula or Museux forceps. The cervical canal must be sufficiently dilated to permit the ca- y passage of the curette. This is safely and quickly accomplished by the graduated or the steel dilators. The choice of a curette is, as has already been hinted at, not a matter of indifference. In general terms it may be said that dull instruments are most suitable and safest for obstetric cases, while the sharp or cutting instruments are most serviceable in gynecological cases. The scraping of the cavity of the womb should be done in a systematic manner. Beginning at a certain point, say the posterior wall, every part of the surface should be carefully gone over until the starting point has been reached. During the progress of the scraping, if it is necessary from time to time to remove the detritus this can be done by the spoon-shaped instruments or by the irrigating tube. If it is desired, the field of operation can be entirely submerged throughout the operation by an anti-ptic solution, by simply elevating the hips of the patient and filling the vagina with the fluid. When satisfied that every part of the cavity has been curetted it should be thoroughly irrigated with a hot anti-ptic solution, this followed by application of some mild caustic or packed with a strip of iodoform gauze. The patient should be kept in bed for three or four days at least, even in the simplest cases, though, to emphasize the safety of this operation under antiseptic management, I have seen surprisingly good results follow the use of the curette in gynecological cases, with no bad effects whatever, that were operated upon in the University outdoor clinic, and were allowed to go some distance to their homes, and this where it is certain injuctions to remain in bed were not followed. It has been extremely gratifying both to Prof. Anderson, with whom I have been associated, and myself, that not one unfortunate complication has followed this method of treatment in the many cases that have been subjected to it, even with the rather incomplete antiseptic possibilities of
an outdoor clinic. But even with so good a record to substantiate the foregoing similar risks are not advised, only mentioned to demonstrate the possibilities of this treatment.

"The special indications are so numerous that even brief mention of them in this connection will not be permissible. In obstetric practice there are two conditions that demand a curette, and demonstrate its usefulness most plainly. They are persistent hemorrhage, due to retained secundines or fungous degenerations of the endometrium after labor or abortion, and the septic conditions of the puerperal patient. It is in this class of cases that the dulled curette finds its greatest field of usefulness and yields the most brilliant and satisfactory results. Particularly in those annoying hemorrhages that follow incomplete abortions does the curette answer the demand. Instead of temporizing with ergot, hot douches or other hemostaties, the curette is the certain, safe, and rapid substitute. Much time and annoyance is saved and the subsequent progress of the case is most gratifying.

"In the management of septic conditions that follow labor, either premature or at full term, I am disposed to claim for the curette an important place. Any one who has made even a microscopical post-mortem observation of the endometrium in a case of puerperal septicemia can see at a glance the indication for the curette. Here is a cavity, the lining membrane of which is a decomposing mass. The most important part of the management of such a case is to cleanse this cavity, and afterward to keep it clean. I do not advocate inconsiderate invasion of the puerperal womb, on the contrary, unless the indications are plain, am much opposed to it. I am satisfied that many cases, especially in private practice, are lost because we are either too slow or else lack the courage to apply remedial measures that give us the best and often the only hope. I refer especially to the intra-uterine douches and the curette. The douche should always precede the curette, and it should have a fair trial, even to the extent of continuous irrigation. If the continuous irrigation fails, recourse to the curette is the dernier ressort. The curetting will not reach poison that has already been taken up by the lymphatics or blood-vessels, but it will limit the further production of it. With the curette the sloughing surface is bodily removed, and with it the focus of infection; in fact, we are treating this as we do any sloughing surface in surgical cases. It will be seen at a glance that this procedure should not be deferred too long, if we would reap the benefit. Many cases apparently hopeless may be saved by this active and radical measure. The limits proposed for this paper will forbid extended account of the application of the curette to many of the particular cases of gynecological character, or to detailed description, other than what has previously been mentioned, of the method of using it.

"In those obstinate cases of so-called 'uterine or cervical catarrh' that become such an annoyance to the busy practitioner, and such a godsend to the poor but aspiring young gynecologist, because they are not inclined to get well, of all curative procedures that are lauded by their respective authors, none promise so well as a vigorous attack with a sharp curette. My own experience with the curette in this class of cases has been uniformly satisfactory. The curettning must be deep enough to remove the diseased follicles to their entire depth, and when this is done certain relief will seldom fail. Painful and intractable cases of membranous dysmenorrhoea can be most effectively treated and cured with judicious use of the sharp curette. The operation should be performed just prior to menstruation. The small sized submucous fibroid tumors that cause excessive and dangerous menstruation, can be brought under the benign influence of the curette with signal advantage. The hemmorhage in these cases is not so much from the tumor as from the uterine mucosa, which is kept in a constant state of congestion and irritation by the presence of the fibroid. Much can be said of the value of the curette in the management of cases of uterine cancer that are beyond the reach of the more radical operations. The unfortunate patient can be made more comfortable to herself, her friends, and attendants, the rapid progress of the destructive process may be in a measure stayed, septic infection can for a time at least be warded off, and
alarming hemorrhages can sometimes be anticipated and put under more perfect control. The scrapings of the curette can be utilized for diagnostic purposes when cancers are suspected in the body or fundus of the womb.

"Enough has been said to fully demonstrate the usefulness of this instrument in the gynecological field. While much may be said of the indications for the curette, much has also been said as to the contra-indications, perhaps too much. Many modern authorities seem disposed to ignore such contra-indications as have become classic, namely, acute inflammation in and about the uterus and its appendages, and also chronic inflammations in the same regions that have left the womb fixed by many adhesions, and which seem disposed to rekindle upon slight provocation.

"I can not yet bring myself to the point of advocating the bold use of this instrument in the presence of such conditions when the results may be so dire and regrettable."

**DISCUSSION.**

Dr. Palmer: I think Dr. Cecil's paper is one of the best that has ever been read before this Society. I have a number of cases of gonorrheal endo-cervicitis and metritis constantly under treatment, and in the management of these cases I have been doing a good deal of rough curetting, but with a dull instrument. I have had no trouble in passing the curette to the fundus, and following the doctor's suggestion of beginning at a certain point and returning to that point, curetting the entire interior of the uterus, removing a considerable quantity of muco-purulent material; there has usually been considerable bleeding following the operation. The last patient I operated upon was to have returned to day; whether there has been a continuous hemorrhage or not I am not informed. I am certain, however, if there had been any further trouble I would have heard of it. I am very favorably impressed with the idea of free curetting. I have frequently irrigated the uterine cavity with 1 to 500 bichloride of mercury solution, hoping it will go into the tube rather than with the fear that it may go into it. There is no question but a great deal of this solution is left in the uterine cavity afterward; I rather hope that some may be left there. I must say that in my experience, extending over more than twenty five years, I have never seen any bad results further than an occasional sharp pain for half an hour or so, follow a free washing of the interior of the uterus. Of course my attention to the uterus now is confined almost entirely to that organ when it is probably the seat of venereal lesions. I shall certainly provide myself with a sharp curette, and use it hereafter in these cases in preference to the dull instrument I have heretofore used.

Dr. F. C. Simpson: Just in this connection I want to say, that in the last week I have had occasion to curette the uterus of a woman who had aborted, followed by continuous flooding. I went over the whole cavity with a dull curette, removing quite a quantity of fungous material; she returned to-day and reported that the hemorrhage had entirely ceased. I examined her with a speculum and found a healthy condition. There was some little granulation around the opening in the cervix, but she had been relieved of that uncomfortable heavy feeling and bearing down sensation. I simply mention this case to corroborate what has been said concerning the use of the curette.

Dr. J. G. Cecil: I have very little to say in closing. In dilatation of the cervical canal I have never used tents at all. I can frequently accomplish dilatation in a very little time to such extent as to admit of the free and easy use of the curette without anesthesia, using a Goodell dilator. I simply dilate the cervical canal sufficiently to enable me to freely use the instrument—no further. I am very sorry that the limits of my paper would not admit of a detailed report of a number of cases both in obstetric and gynecological practice. I am more particularly interested in the use of the curette in gynecological than in obstetrical cases, and while this is a Surgical Society, still the question of its use in obstetrical cases demands some attention. I should have been
very glad to have heard a discussion upon the use of the curette in obstetrical cases.

While the cases I have referred to as being followed by uniformly good results in the University outdoor clinic, many of which have been put in the carriage and driven two, three, and four miles, those results were obtained in gynecological cases; but I have had equally as satisfactory results in obstetric cases, and this was the point I wished particularly to hear discussed. I think the fear in regard to the use of the curette has been much magnified in the minds of many obstetricians.

Concerning infection of the puerperal womb: I have in mind now the case of a young woman who mi-carried at three or four months, and had evidences of septic infection, so much so that her attending physician became very uneasy. I put this patient upon the bed and without anesthesia irritated the womb thoroughly, and with a dull curette scraped away every thing from the cavity, and had the satisfaction of seeing the woman make a perfect recovery without any further infection. I have recently been very favorably impressed by an article by Pryor, of New York, on this subject; he takes the position (and I perfectly agree with him) that we ought not to allow patients to die of septic infection of the womb without giving them the opportunity of the advantage and benefit to be derived from the curette, at least the possible chance of preventing the spread of infection and limiting that which has already been observed. I think before many years have elapsed the curette will be used in common practice.

Dr. W. L. Rodman exhibited pathological specimens: The patient from whom this specimen (testicle) was removed gave the following history: He was an exceedingly robust, vigorous young man, about twenty-four years of age; was sent to me by a medical friend. I saw him for the first time about ten days ago. He had a hernia on the right side, which he tells me was cured by a truss, and had been cured for five or six years. He had a retained testicle on the left side. The testicle which was small in size and soft in feel, was found located just in the external abdominal ring. It was not possible to pull the testicle down into the scrotum, on account of the shortness of the cord. Owing to its very soft consistence, and its probable functional inactivity, I advised immediate removal; the patient consented conditionally, saying that, of course, he would like to have it removed, provided there was no chance of saving it. I told him that when we cut down upon the testicle if we found it in a healthy condition, an effort would be made to preserve it by transferring it to the scrotum. I operated upon it and after cutting down around the organ found it very small and even softer than I suspected, and that it had undergone cystic degeneration. The testicle was immediately removed, transfixing the cord and tying each way. I am inclined to the opinion that all retained testicles, even in the inguinal canal or out-side of the external ring, should be removed. When retained in this situation they are usually small and imperfectly developed organs, without function, and there is a decided tendency to undergo sarcomatous change.

Dr. A. M. Vance: I have seen a great many cases of this character, and believe in the majority of them the testicles are practically useless.

Dr. Palmer: I believe that all testicles retained anywhere in the canal are not only useless but are dangerous; in the abdominal cavity they may be active and useful. I have already reported one case of a bridge-builder who came to me for treatment for another trouble, having incarcerated testicles in the groins. He called my attention to this condition, and asked me if I thought he could get married. I told him that I believed he was sterile, but to bring me a sample of his semen and I would make an examination of it. This was done, and I found the semen utterly devoid of spermatozoa. He did marry, but his wife never conceived. I have never seen a case of malignant degeneration of the testicles from being retained, and have seen a great many monorchids and cryptorchids.

Dr. Vance: I have treated a great many for replacement of the testicles, and have often succeeded. I have a case under treatment now where a surgeon in town had applied a truss over the testicle with the idea of pressing it back into the belly. A number of times have
I taken trusses off from retained testicles being treated for hernia. In the case above referred to, in which there had been an effort made to force the testicle back into the abdominal cavity, I have succeeded in getting it down in a month or six weeks into the top of the scrotum by the application of a truss over it and careful manipulation. I believe in the majority of infantile cases, where the testicle is out of the canal at all, or even approaching the external ring, it can be replaced into the scrotum by a little patience on the part of the mother.

Dr. W. C. Dugan: I believe that Dr. Rodman did exactly right in removing the testicles, as, when retained in the canal, they are very prone to undergo malignant degeneration. The question I want to bring up is this, and, as I have stated before, when these cases come under our observation early in children, if every thing else has been tried, and the testicle remains in the canal, and we can not get it down, and the mother and father are very anxious to save the testicle, inasmuch as we know that when these testicles are in the cavity of the pelvis, they are normal and serviceable, and a testicle in the canal is subjected to pressure and liable to undergo malignant or inflammatory degeneration, that these testicles should be put back into the pelvis. I think this will be the operation in the future.

Dr. Rodman: I have seen in the last few days the most remarkable case that I have ever seen in my life, the most deplorable ending to it. Last Thursday I saw a gentleman for an Accident Company, about fifty-five years of age, laborer in one of the breweries of this city, who, by some accident, had sustained a simple fracture of the di-tal phalanx of the great toe near the joint. I saw him for the first time Thursday afternoon, after considerable swelling had taken place. I ordered hot applications; saw him again Friday, and he seemed to be getting all right. I saw him again on Saturday afternoon, five o'clock, and noticed he was a little nervous. His wife said that he had some fever in the forenoon, but did not seem to have any when I saw him at five o'clock in the evening. I did not use the thermometer, however; he said he was feeling very comfortable, and remarked that the hot water had relieved the pain. I told him he was doing so well that I would not call again until Monday. I learned to-day (Monday) that he was dead, I at once went to the brewery to learn the particulars, and found that on Sunday morning, about two o'clock, he jumped out of the second story window; did not hurt himself in jumping; wandered around town, went to the brewery and remained there two or three hours; bought two bottles of whisky (pint bottles) and wandered out to the country, and was seen six or seven miles from town yesterday at noon. He was very thirsty, and went to a farmer’s house and asked for a drink of water, then tried to climb up the side of the stable, saying that he wanted to get into his room. He wandered around all day yesterday, and was found dead about four o'clock this morning, with two empty pint bottles in his pocket, which evidently had contained whisky. This man had been working at the brewery, and had probably been in the habit of drinking a great deal of beer. When I saw him on Saturday afternoon I did not tell him to drink more or drink less. I thought, as he was a little nervous, possibly he was not getting quite as much beer as he was accustomed to. The question is, what ought the Accident Company to do in a case of this kind? I am very frank to say that the man may have had delirium, even as a result of a slight injury like that. It is questionable as to how much was due to whisky, and how much due to fever, the result of this simple fracture of the distal phalanx of the great toe.

I remember reporting to this Society four or five years ago a case of delirium after fracture of the leg. I held at the time that the delirium was due to the fracture.

Dr. Palmer: My experience with these men who work about breweries and about beer saloons, and who are constant beer drinkers, is that they usually wind up the day with whisky or brandy; that beginning the next morning they drink whisky or brandy, which in both or either instance is usually a very inferior article, and begin their beer again about ten o’clock in the day. I think the case reported is clearly one of surgical delirium in the drinking man.
Dr. Dugan: The question is whether the Accident Company should pay the amount of insurance; I think they should. Why, because undoubtedly the fact was known that the man in question was a drinking man at the time the insurance was taken out. The company assumed the risk, and I think should pay for it. It may be true that the man developed delirium tremens, and he was practically predisposed to it. On the other hand, his death might have been the result of uremic coma.

Dr. H. H. Grant: I have seen a great deal of delirium tremens, and it has been my observation that it nearly always occurs, for some reason, after fracture or other minor injury. In the case reported by Dr. Rodman, I do not think the man would have sustained the injury if he had been carefully watched and properly nursed. I believe it is fair to decide that the accident was not the cause of this man's death, but it was the predisposing cause. I do not think the Accident Company is responsible, for the reason that the man was under the care of his family and should not have been allowed to jump out of the window, subjecting himself to that risk. I think the position taken by Dr. Dugan is hardly the proper one for us to hold.

* Dr. Rodman: I failed to state that this man lived up-stairs with his wife who is an invalid, and therefore not able to restrain him. I shall certainly advise the company to pay the insurance. Had he not received the injury he would not have had delirium tremens.

JAMES S. CHENOWETH, M. D.,
Secretary.

LOUISVILLE MEDICO-CHIRURGICAL SOCIETY.*

Stated Meeting, November 23, 1892, Dr. F. C. Simpson, President, in the chair.

Dr. J. B. Marvin: This patient (presenting case in person) I saw for the first time in 1883, and incorporated his case in a report I made to the Kentucky State Medical Society, which met at Crab Orchard that year. At that time he was a student here in the Commercial College. Two years ago I saw him again, at which time he entered the Baptist Theological Seminary here, where he is studying at the present time. I have not examined him since, and have only seen him once or twice in an attack that he called colic. The case is an extremely interesting one; it is not often that you can obtain as complete history, and one that can be followed for several years. He has all the symptoms of lateral sclerosis; there is no history of injury or specific cause which would account for this transverse myelitis, and it looks more like a case of primary lateral sclerosis than any I have ever seen. Perhaps the early history of the case is best told in the patient's own language:

"I noticed the first indications or symptoms of this trouble when I was fifteen years of age, at which time I was working on a farm down in Tennessee. We began our farm work early, some time in the month of January. About the middle of May I began to have a very tired feeling, and would often have to sit down and rest; after sitting quietly for a half hour or so I would get up and go on about my work, but would not feel rested, especially about my limbs. Matters went on in this way until I was twenty years old. I would go to school for a few months in the year and work on the farm the balance of the time. About this time I experienced a little hesitancy in picking up my feet, but did not think any thing of it, and went on working in that way until I was twenty-three, then began to use my cane a little, having greater difficulty in moving my limbs and feet, particularly in lifting my toes from the ground. I have continued to go along in about that way until the present time. I am inclined to attribute the trouble to over labor on the farm; if this be not the cause, then I do not know what it is. I never sustained an injury that I am aware of; have been thrown from a horse twice, but do not remember to have been injured other than a thorough shaking up. The trouble does not seem to have progressed very much, that is, since I was twenty-three years old; I can stand in one position without any tremor, it tires me to walk more than any thing else. I say it has not progressed; I believe I have noticed that it hurts me more to go up the stairs since I have been at the Theological Seminary than it ever did before. This may be accounted for by the fact that I go up and

*Stenographically reported by C. C. Mapes, Louisville.
down stairs a great deal, and it is necessary for me to be on my feet several hours each day. I want to say this, that I am exceedingly anxious to be relieved of this trouble, and would be very glad if some means could be devised to accomplished the desired end."

Dr. Marvin: When this man first came to me he had typical stiffness and rigidity of the muscles, with a tendency to contraction, and almost absolute inability to lift his toes from the ground. He had most marked tendon reflexes, as well as ankle-clonus, and decided tremor. He has always had good digestion; there has been no disturbance of the bowels; no interference with the renal secretions, and he is mentally as well as he ever was. He has never had any eye or head symptoms. As far as medicine is concerned, I have told him there is nothing that would do him any good; the damage is done, this degenerative change has already taken place, and that he would have to make up his mind to be a cripple for life so far as his legs are concerned. The trouble does not seem to affect him further than that; there is no atrophy of the muscles of the legs. The increased reflexes, rigidity, and peculiar walk make the diagnosis.

In regard to the localized lesion the only question is, what was the cause, whether it was primary or secondary degeneration. I am inclined to think it is primary, certainly all the symptoms and history point in that direction. Authorities claim that there is no case on record in which the autopsy proved that this is purely a primary trouble, but that it is always secondary. Of course it is very difficult to determine whether a man has not received an injury sufficient to cause some of the symptoms present in this case, and it may be that in a fall or in his work he has sustained a strain sufficient to produce irritation in the cord—secondary degeneration. There is absolutely no history of specific trouble. He claims never to have suffered a pain of any kind in his life. Another strange feature, if this is a secondary degeneration, is that in this length of time he has not developed any head or ocular symptoms. It is not often that we have an opportunity to watch a case of this character for nearly ten years. I do not think that there can be any doubt about the diagnosis. It seems to me to be a typical case of primary lateral sclerosis.

CASE 2. This young man I saw for the first time this morning. You will observe he is a very strong, healthy looking individual, but in walking he uses his legs as though they were pegs, not stiff exactly, but a lack of flexibility. All the muscles of his legs are very hard; there is no patella reflex; legs are edematous along the tibia and pit on pressure; there is no edema above the knee or on the ankle; he has a very irritable heart, quick pulse, short-winded, pulsation at the base, hurts him to go up steps, but no organic disease of the heart, and no murmur at all; has suffered some slight pain in the chest.

This young man with several of his companions a few weeks ago started out to run one eighth of a mile (a foot race for this distance), and he says his "wind" gave out before he had gone more than a few rods, and since that time he has been troubled more or less by this peculiar clumsiness or stiffness of his limbs. When I made the first examination he wore a suspensory bandage; he also had a large bubo on the left side. Before I examined him I had a suspicion that it was specific trouble, and do not now think there can be any doubt about it. It is one of those cases, if it goes on for a while without treatment, that would be classed locomotor ataxia, and some man who understood his business treating it properly, the case would be reported as cured of locomotor ataxia. It has every resemblance to locomotor ataxia in the absence of patella reflex, although this might occur in other troubles. I do not think it is necessary to look for any other cause than specific infection, and I believe specific treatment is clearly indicated.

Dr. A. M. Cartledge: I would like to see this boy go without specific treatment for ten or fifteen days; I can not help believing that there is a traumatic element in the case. I fail to locate the specific lesion in the phenomena observed. In the general symptoms I do not see anything indicating syphilis; the edema and hypertrophy of the muscles might be accounted for by simple trauma. I believe that absolute rest with probably some local applica-
tion to his limbs would be the most rational treatment.

Dr. A. M. Vance: I believe the last case is undoubtedly one of cord trouble. I do not think the effort he made had any thing to do with it. The edema could easily be accounted for by the rigidity of the muscles. In fact the edema signifies nothing; it is not uncommon to see that much edema in a perfectly healthy man, especially one who stands up a great deal. I believe that the great majority of the cord lesions simulating locomotor ataxia are specific.

Dr. J. M. Ray: In regard to the eye symptoms in these cases: I have had under observation for some time three cases of one-sided mydriasis that are peculiar. The first time I saw these three patients was about six years ago, soon after I came to Louisville. They all had one-sided mydriasis and one-sided ciliary paralysis. I have watched all three of these cases, carefully observing all the symptoms. One of them at that time had absolutely complained of nothing; now he is a confirmed locomotor subject. When I first saw him he had no evidence of locomotor ataxia at all. Another one in the last eighteen months has been suffering from what he says is sciatica; has been having pains up and down one leg; for this his doctor has been using a strong galvanic current. The third one was in my office a few days ago, and I questioned him pretty closely, but he denied having had any pain at all. However, he did state that after he had stood on his feet for a while, when he started to walk his feet felt as if they were padded or cushioned. I believe this will develop into locomotor ataxia. All these patients are between thirty and forty years of age. I saw them all about the same time, and they all absolutely deny any specific trouble.

Dr. Wm. Cheatham: I have about a half dozen cases of one-sided mydriasis on hand now.

Dr. Marvin: In my experience I have only met with two cases of locomotor ataxia in which there was a joint lesion. I believe that these cases may be very insidious in their development, and may develop ocular symptoms very early, like those mentioned by Dr. Ray. I have one case under observation now which I have been watching for about fifteen years. The first symptom that attracted my attention was the condition of his eye; contracted, permanently fixed pupil. He went on this way for a long time without developing other symptoms, until two years ago, when he began to have symptoms interfering with his locomotion, that is, his equilibrium, pain in the legs, staggering walk, etc. He has improved greatly under iodide of potassium. There was no history of syphilis in this case.

Dr. Vance: I would like to mention a case. Two years ago Dr. Mathews asked me to see a patient with him, a young woman in this city who claimed she had chronic constipation; that sometimes she would not have an evacuation of the bowels for six months. Her father and mother both corroborated this statement. She looked like a moderately well-nourished woman, brown skin, good color. Dr. Mathews and myself put her under chloroform to see whether there was an accumulation of fecal matter in the bowels, and examined her by palpation, but could not find anything. We then injected into the bowels a large quantity of water, under chloroform, after which there was only an ordinary evacuation. I am absolutely sure that the bowels contained no more fecal matter than in a person who has an ordinary evacuation every day. I believe that this woman was deceiving her parents, and that they were perfectly sincere in their belief that she only had an action of the bowels once in six months. I believe that she had an evacuation every day. While under chloroform we thought she was dead, because of a cataleptic spasm which came on.

Dr. Cartledge: I treated this patient in a violent attack of facial erysipelas; she made a good recovery, and there were no symptoms indicating a disturbance or irregularity of the secretions.

Dr. C. Skinner: I would like to hear a continued report of the case operated upon by Dr. Vance recently at the Infirmary for supposed sarcoma of the uterus.

Dr. Vance: The patient in question has made an excellent recovery. It has since developed that the section shown upon slide of the microscope, which was supposed to have been secured
from the horn of the uterus, was taken from
the fallopian tube, or, in any event, from some
portion of the specimen remote from the horn
of the uterus. If it was sarcoma, it was evi-
dently all removed, as there has been no recur-
rence. The woman has menstruated twice
since without pain, which had not been the
case for twelve years prior to the operation.

Dr. Skinner: I want to report a case show-
ing how a ligature will migrate. In June last
I operated upon a woman, removing a tumor
about the size of a large cocoanut, took out the
uterus, tied off the ovary on the other side,
putting on a double ligature (Tait ligature),
treating the pedicle extra-peritoneally. The
wound healed up very nicely, and the ligature
to all appearances was abs-orbed. The woman
has been perfectly well ever since; about two
weeks ago she brought to me a thread that had
come out of this old scar. It had opened
slightly afresh, discharging this portion of the
ligature. I know it was the pedicle ligature
from the way it was tied. The wound again
healed, and there has been no further trouble.

Dr. Vance: Some time ago I reported the
case of a boy whose leg was amputated at the
hip. I would like to make a continued report
of the case, as it is a very remarkable one.
This boy's history is about as follows: He had
hip-joint disease coming on when he was about
ten years old; there was rapid formation of
pus with abscess in Scarpa’s space. At the
time of opening, upon the introduction of the
finger, it was found that the tissues between
the femoral artery and the abscesses were very
thin, and we did not put in a drainage-tube,
fearing that sloughing would take place. About
a month after opening the abscess, and after
running a very septic course, early one mor-
ing the femoral artery ruptured spontaneously.
The leg was amputated at the hip forty-eight
hours afterward, as the foot was gangrenous.
Operation was done very quickly, the patient
being on the table but a few minutes; but his
condition was such that his recovery was doubt-
ful. About two months after this he had an
attack of double pneumonia; he was still in a
very hectic condition, and very slightly recup-
erated from the state of depression he had al-
ready arrived at, and looked as if he was going
to die shortly, but the crisis came after about
three days. He recovered from the pneu-
monia, that is, the right lung cleared up very
well, but the left side of the chest remained
dull, the heart beating over to the right side,
and we soon found that he had an immense
accumulation of fluid in the left chest, which
was tapped three times; three and one half
pints of fluid removed the first time, two pints
the second, and two pints the third, a pint of
which was pus. By this time he was getting
pretty shaky again, and I determined to give
him another chance, so excised the eighth rib
about a week after the last tapping. The cav-
ity was thoroughly washed out with hot water,
and two large drainage-tubes inserted. In
wa-hing out the chest it was done very thor-
oughly, throwing the water in through one
tube, which came out of the other, and with
each inspiration and expiration it would work
like a force pump. The tubes were allowed to
remain in for about ten days, when they were
removed and a pledget of gauze inserted into
the cavity; this was also removed in a few
days, and the wound healed perfectly.

I think it is quite a remarkable case, the pa-
tient going through two grave operations and
double pneumonia inside of three months.

Dr. Cartledge: I have recently had several
cases of empyema, which have been operated
upon by resection of a portion of rib. One
case was particularly interesting, in that the
matter was discharged through a sinus in close
proximity to the pericardial sac. The patient
has done very nicely, and the tube will be re-
moved to-morrow or next day. I wish to ask
Dr. Vance what method he employed in ampu-
tation at the hip-joint to control the bleeding.

Dr. Vance: The artery was already tied,
owing to spontaneous rupture. I read a little
paper the other day at the Southern Surgical
and Gynecological Society making a plea for
more rapid surgical work. I will state that in
the amputation at the hip, which I have just
reported, the operation was done and the boy
back in bed in less than nine minutes. I be-
lieve that two or three minutes more would
have caused his death. Resection of the rib was
done in seven minutes; of course this is a much
easier operation than amputation of the hip.
Dr. D. T. Smith: I exhibited before this Society some time ago two small girls suffering from a peculiar nerve trouble; they were taken about the same time with headache, staggering gait, falling backward, etc. No diagnosis was made and no treatment instituted. In the course of two or three weeks both children were well, and have remained so.

Dr. Skinner: Some of you will remember the leg that I exhibited at a recent meeting, removed from a man seventy-two years of age on account of sarcoma. The patient has gotten along without any trouble whatever; has gone home now. I have not yet had the specimen examined microscopically.

Dr. Marvin: Bearing upon Dr. Vance’s case, the question has often arisen whether there would be any depression after resection of a portion of rib in cases of pleuritic trouble. I have recently seen several of these cases, in all of which there seemed to be perfect restoration of the lung, and no depression. From the external appearance you would never know that a piece of rib had been removed, and the pleuritic effusion evacuated, except for the existence of the old scars.

Dr. Cartledge: I would like to ask Dr. Marvin if he does not believe all of these cases of pleuritic effusion, whether purulent or otherwise, are microscopic in origin?

Dr. Marvin: Yes.

Dr. Vance: In all the cases I have had there has been perfect restoration of the lung.

Dr. J. E. Hays: Is it necessary always to remove a portion of rib to bring about drainage in these cases?

Dr. Cartledge: I believe that in seventy-five per cent of the cases it will be found necessary to resect part of the rib.

Dr. Hays: I remember a case I had while I was interne at the City Hospital. An incision was made in the seventh intercostal space, a drainage-tube inserted, and the cavity thoroughly washed out with carbolized water. The patient made an excellent recovery. It never became necessary to excise the rib. Before the operation the patient was almost unconscious; chloroform was not administered in this case.

J. E. HAYS, M. D.,
Secretary.

Reviews and Bibliography.

Diseases of the Rectum and Sigmoid Flexure.
By Joseph M. Mathews, M. D., Professor of Surgery in the Kentucky School of Medicine, Louisville, Ky., etc. New York: D. Appleton & Co.

This work, like the many contributions to current medical literature by the author, bears upon every page the mark of originality and practicability. Realizing the importance of the field, and its neglect, Professor Mathews enlightens its dark places, not with untried theory and vague suggestion, but with exact knowledge drawn from a rich and varied clinical experience of fifteen years duration. In this day of successful specialization it is not necessary to indicate how eminently appropriate it is that such subjects as are treated of in this book should receive the entire professional attention of the investigator. Books upon general surgery can not even offer to fulfill the obligation. This handsome volume, of nearly five hundred and fifty pages, is the largest work upon the subject in any language, and, in adding the consideration of diseases of the sigmoid flexure, Professor Mathews has included kindred lesions which so simulate and complicate local rectal affections as to be inseparable in either diagnosis or treatment. It is greatly to be commended of this book that, while the views and operations of many surgeons are considered and discussed appropriately, the author has approved without question only such measures as experience has shown both practicable and successful; so that there comes a feeling of certainty to the reader, when he has pursued the study of any given subject, that a means of relief is suggested which will meet the indications. Though the author is authoritative, he is not dogmatic; and though his sentences imply confidence in his methods, they are neither oracular nor apologetic. The importance of accurate diagnosis, and of instruments and apparatus for making it, is given great prominence in the introductory chapter. A number of instruments and aids are figured in the book without description or comment, by which we are supposed to understand they are luxuries not to be greatly desired. Professor Mathews calls the attention of the profession
to the malpractice of certain homeopathic surgeons in excising the pockets of Horner at the internal sphincter, under the pretext that they are pathological, and emphasizes the danger which arises after such a step. It is well known to the profession of this city that such practice is being extensively done here, often to the greatest damage to the patient, and never with any possible good; a shameful reflection upon the integrity and knowledge of the operator, and a crime against the ignorant and trusting patient.

The anatomy of the rectum and the reflex influences due to the nerve supply receive a chapter of attention. Constipation is discussed for fifty pages, and the details of antiseptic surgery of the rectum and surroundings are given. The author's views upon the use of the ligature in fistula are familiar from frequent expression in the medical meetings of this country and repeated publication. His objections to the Whitehead operation for internal piles have appeared elsewhere. His opposition to colotomy, urged at the Washington meeting of the American Medical Association in 1891, has been little modified, and he is not in accord with the great body of surgeons in this particular operation. The technique of inguinal colotomy with some modification is described and illustrated. It is to be regretted, perhaps, that such a toy as the fistulatome should find place in this work, since, in all cases where such an instrument can be of any utility, a slight operation with a knife would far more promptly and certainly effect a cure, though it is due the author to say he only offers it as a substitute for the ligature when the knife is refused. This book, which fully covers the ground in a masterly and practical manner, is beautifully printed and illustrated (with six colored plates and many engravings), is a guide to the management of the affections of which it treats, which one looking after such troubles can barely get along without. The reputation and surgical standing of the author, the fullness of the work, and the clearness of all instruction and directions make the book almost indispensible to the student and general practitioner as well as to the special surgeon.

H. H. G.


Ædeology (a discourse on things to be spoken of with modesty) is a fairly well-written and interesting book on an important subject, but unluckily so well and so capably worked already that the author has been able to find scant gleanings in the way of valuable new facts and original opinions. The work is divided into three parts. The first deals with pre-natal influences and the requisites for having a well-born child; the second relates to the prevention of conception, while the third deals with the hygiene of the reproductive system.

If we do not incline to opinion that the author adds any thing to the available knowledge of the themes discussed, it is not to be denied he deals with interesting questions.

That the condition of the mother's mind affects the constitution of the child is as widespread, and perhaps almost as old, as humanity. The Greeks habitually taught that agreeable and beautiful objects should surround and be contemplated by the mother while pregnant in order that her offspring might thereby be favorably influenced, while the scriptural reports of the result of the sights upon which honest old Jacob fed the eyes of Laban's cattle go to show that the Israelites al-o knew a thing or two in that line. However, as the wish is known often to be father to the thought, it may be sometimes father to the act, and there are those irreverent enough to suppose it barely possible that, while Laban was off on the spring "round-up," Jacob slipped the appropriately colored bull into the pasture with the amorous healers.

That such pre-natal influences can be exerted as result in physical marks and mental characteristics in offspring carried at the time there is good reason to believe, but the difficulty is to be sure just how much is coincidence and how much result. But when we are told that Burns' mother went about her work singing old songs and ballads, and thus conferred upon her son the genius he possessed, would it not be much more reasonable to conclude that the
mother by this very conduct showed that she possessed the germs of the genius that bloomed out so transcendently in her son. Otherwise it would be well to pass a law that all pregnant mothers sing old songs and ballads.

And likewise, if it be true that Zerah Coburn was endowed with his marvelous mathematical genius "by reason of the fact that his mother had in her mind for a day and night the puzzling question as to how many yards of cloth a given amount of yarn which she had would make," is it not a wonder that the whole backwoods did not swarm with mathematical geniuses in early times, when we consider how every industrious housewife was perplexed with calculations about biers and bout's and cuts and hanks and reeds and gears and hundreds and warp and filling.

The argument might have been fortified by the history of Tristam Shandy, who suffered so greatly from indecision of character, due to the fact that the clock struck at a critical period of his begetting.

What the author has to say of abortion is only too true. If only the truth about the actual status of the matter in this country should happen to be preached to the Chinese, it is to be feared our missionaries would have a much harder time than they have already. The author had designed to give a chapter on the prevention of conception, but withdrew it just before going to press, owing to a bill rushed through at the last moment by a recent session of Congress. It is not easy to see, however, how this could affect his circulation, except through the mails.

However, the loss has been fairly well anticipated, as the little work of Robert Dale Owen has long taught the only known means of safely accomplishing that end.

No doubt great good might be accomplished for the human family by well-directed measures regulating conception. But the misfortune is that a knowledge of the requisite measures will not be made available except by the intellectual, the proud, and the ambitious. The lazy, stupid, and listless will go on multiplying, and in consequence the progress of the race toward a higher standard is greatly hindered by such practices. If Dr. Elliot can persuade this lowest class to practice prevention, he will earn all desired reward and promotion as a mission ary. D. T. S.


It is always a pleasure to read the Transactions of the American Surgical Association. One realizes that it is composed of a body of men who come together to have light shed from the best sources on the matured views the whole field of experience affords. Its transactions approve themselves as ranking with those of any Society and of any country. The three leading features of the transactions are the address of the President, Dr. Phineas S. Conner, of Cincinnati; the essay on fractures of the lower end of the humerus and of the base of the radius, by Dr. John B. Roberts, of Philadelphia, and the essay on fibrous tumors of the uterus, by Dr. John Homans, of Boston, and that of Dr. P. Dandridge, of Cincinnati, on the surgery of the tongue.

Dr. Conner's address was a review of the recent progress in surgery, and while giving full recognition to the great progress that has been made, takes his position fairly within conservative lines. Thus, in regard to abdominal surgery, while fully recognizing the marvelous result attained, he asserts what we all know and what it is a duty to speak plainly, that operations of this class "not seldom have been, it may be believed, ill-advised, ill-timed, unnecessary, and harmful, entered upon by inexperienced men, whose eagerness to cut has found explanation in the fact that in simple abdominal section few operative difficulties are met with, and no dangerous hemorrhage is to be expected, the arresting of which might test the knowledge and skill of the operator." He is also doubtful if the total of life in patients operated for cancer of the stomach is equal to what it would be without operation.

The paper of Dr. Roberts is exceedingly interesting from the diversity of views it develops among the leading English-speaking surgeons as to the kind of bandage to be used,
the position in which the limb is to be bandaged, and the time when motion is to be commenced.

Dr. John Homans read a very interesting paper on fibrous tumors of the uterus, setting forth the instructive features to be derived from a study of five hundred and twenty cases met with in his own experience. Of these five hundred and twenty cases he operated on sixty or eleven per cent. All the reasons given by Dr. Homans, except one, seem justifiable, and that is to be led to this step by the wishes of the patient. Of a woman a-king it as a cosmetic operation, he says: "It is her tumor and her life and her body and appearance, and she has a right to look like other women if she wants to." It is hardly to be supposed the learned doctor would use the same plea if she should come to him and demand that her throat be cut.

In the discussion of Dr. Homans' paper Dr. Vander Veer, of Albany, New York, related the history of the work of Dr. Joseph Price, of Philadelphia, who in eighty-two cases of large multilocular nodular fibroids and myomas had performed extra peritoneal hysterectomies and lost but five cases, all but one of the five cases being virtually doomed to death before the operation by the condition of the patient. It seems rather strange that Dr. Vander Veer, believing this report, should in the same connection state that the danger in treatment of fibroid tumors rests quite entirely with the size of the tumor, and that it is the large ones that give us our rate of mortality.

It would really seem to be not altogether unmixed evil that one man should far outstrip his fellows in performing a dangerous surgical operation. It can hardly be doubted that large numbers of lives have been sacrificed by attempts to imitate the brilliant performances due to the genius of Tait. But worse still, perhaps, is the effort to imitate the brilliant performances that never existed except in the reports of ambitious narrators. In the one case the operator's cases at least get the advantage of his skill, but in the other there results only disaster from attempting to duplicate fictitious experiences.

Dr. Bradford, of Boston, read a paper on ulcer of the stomach, and suggested its being brought into the domain of surgery. Dr Bradford's suggestion will be emphasized when suffering himself from ulcer of the stomach, he shall ask its treatment by surgical operation.

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D. T. S.

A Treatise on Nervous and Mental Diseases. By LANDON CARTER GRAY, M. D., Professor of Nervous and Mental Diseases in the New York Polyclinic, Ex-President of the American Neurological Association, etc. In one very handsome octavo volume of 681 pages, with one hundred and sixty-eight line engravings. Cloth, $4.50; leather, $5.50. Philadelphia: Lea Brothers & Co. 1893.

From the Preface: This book is an endeavor to put a working knowledge of nervous and mental diseases into the hands of students and practitioners. The compilation even of an encyclopedia would have been comparatively an easy task, calling only for a judicious aggregation of material. In contradistinction, the purpose and limits of a treatise require the selection and clinical verification of facts, and to this most important element of my work the leisure of seven years has been devoted. Keenly appreciating the patient toil of the scientists, to whom we owe most of our knowledge, I have held the task of the physician in yet higher esteem, as the latter must make utilitarian application of all the facts collected by the former. There can be no loftier aim in medicine than the relief of human suffering, and to this end I have endeavored to glean from the many departments of medical science whatever they could contribute.

This volume is addressed especially to the general practitioner, present or future, and its theme is rigidly therapeutic. Those who may use it will find that it does not assume previous knowledge of its subjects on their part. The space assigned to the several diseases is determined by the needs of the profession at large, a consideration which has made the chapter on Neurasthenia the largest in the book. Mental diseases are considered from the standpoint of the general physician, since the outcome will often depend on his skill in early recognition and treatment. I have endeavored to indicate what diseases of the mind may be best treated at home, what may need both home
and asylum treatment, and the period of committal, and what may require seclusion from the outset. A novel feature in a work of this kind is the inclusion of the medico-legal aspects of nervous and mental diseases.

In carrying out the therapeutic aim of the book, each chapter has been made to contain its own section on treatment. Special care has been taken to make the therapeutic suggestions sufficiently precise to cover the varying stages, symptoms, and complications of disease, as well as to follow the important indications afforded by differential diagnosis. In the chapters upon Mental Diseases the most approved treatment is stated, and likewise the results to be expected. Only that knowledge has been admitted to these pages which has stood the test of experience.

Students will find the terminology rendered easy of acquisition by the derivations and definitions given in the Glossary. Throughout the volume simple Anglo-Saxon terms and familiar synonyms have been preferred. The limits of the book have rendered necessary a certain degree of terseness, but those who are desirous of further investigation will find a full bibliography appended to each chapter. I have made liberal use of illustrations, deeming them essential for explanation and vividness. They are largely original, being mostly made from specimens and photographs.


This little work, by a master in his department and with complete latitude in his choice of subjects, could not fail to be both interesting and instructive. According to Mr. Harrison about three fourths of the men who pass sixty years of age have distinctly enlarged prostate, but less than twenty per cent of these are in any way inconvenienced thereby. As a means of preventing trouble in a large per cent of cases, he recommends the habitual introduction of a suitable bougie. This must be commenced before the bladder becomes over tolerant of urine and its walls have lost their tone from habitual overdistension. Catheters he would forbid as long as possible, for the reason that their use prevents that exercise of the bladder muscles that is necessary to preserve their tone.

When such measures fail and catheterism can no longer be carried on by reason of hemorrhage and irritation, resort is to be had to suprapubic cystotomy in cases that give promise of being able to bear it. In others nothing remains but puncture, preferable in the author's opinion, through the prostate.

In the treatment of diseases of the bladder Mr. Harrison sets much store to sterilization of the urine, in this respect differing with many therapeutics who think that for the most part demulsion means dilution. It is really not easy to believe that any good effects that result from quinine or boric acid in vesical affections are due to germicidal effects after these drugs have passed through the blood and been eliminated.

Mr. Harrison, in confirmation of his own experience, gives that of Dr. E. R. Palmer, of Louisville, who has prevented the occurrence of urethral fever by the administration of ten-grain doses of boric acid in such operations as internal urethrotomy.

Quinine and boric acid being poor germicides at best, it would be a remarkable fact, indeed, if they could traverse the system and then exert the influence attributed to them in the bladder.

Urethral fever is in all likelihood a reflex disturbance. It does not matter if it is produced by the action of toxaalbumen on the extremities of nerve filaments supplied to the bladder and urethra, it is still reflex and not central. A much more reasonable conclusion, it might seem, would be that these and other drugs of the kind exert such an influence on the terminal nerves as prevents reflex disturbance. The important fact, however, is that they do exert such an influence, and that surgical interference with the urethra and bladder are rendered much safer and more tolerable by their employment.

Instructive remarks follow on hematuria, the early detection and treatment of stone in the bladder receive consideration, and an interesting little volume is closed by observations on
some miscellaneous points on the kind of bougie to use, and the method of their employment.  

D. T. S.

Diseases of the Eye, Ear, Throat, and Nose.  

From the Preface: To facilitate the acquisition of a well-assorted knowledge of diseases of the eye, ear, throat, and nose we have endeavored to condense into this volume, in the most complete and concise manner possible, the essentials of these specialties. To the student such brief volumes have a double usefulness, not only presenting the facts, but saving his attention to lectures from interruption by note taking. It is also hoped that the volume will serve to refresh the memory of the busy practitioner, as it is in reality a trustworthy digest of the best and latest works on these specialties.


In revising this volume the author has added about one hundred and fifty pages to the number contained in the first edition. These additions, beside a thorough general revision throughout, include new sections on Multiple Neuritis Beri-beri, Branchial Neuritis, Senile Paraplegia, Woman's Disease, the Peroneal Type of Muscular Atrophy, as well as extensive additions to the account of the Functions of the Cord, Muscular Dystrophy, Traumatic Lesions, etc.

The results both of the author's experience and the observations and investigations of others for the last five years, since the appearance of the previous volume, have been incorporated in the text.

It is hardly too much to say that "Gowers" did not need this to entitle it to the very foremost position of all works on the same subject, and now still greater becomes the task of whoever may be fortunate to outstrip it. This is indeed one of the few classic works in which the highest scientific learning goes hand in hand with a style that would stamp an effort in pure literature as highly creditable. The style is translucent, and to the curves of the sentences the term liquid might be applied. The author always has his theme perfectly in hand, and his descriptions are so clear and graphic that only a little effort of the imagination is required to supply the reader with all the advantages of the clinic. Well may it be said that in clearness and conciseness, in vividness of description and completeness, it is without an equal in any language. Indeed scarcely another approaches near enough for comparison.


The emulation among the various publishers of "Quiz Series" is resulting in the production of a number of very excellent compend on nearly every subject in medicine. The one before us is no exception, though it lacks one feature that many would think an advantage. It is almost wanting in plates. True, it is no doubt better that the student should get all of his illustrations from the prepared subject when possible, but it often happens that study can be given to the subject when opportunities for dissection are out of the question. Under such circumstances no satisfactory progress can be made without abundant illustrations. Another improvement that might suggest itself would be a tabulated list of the principal muscles especially placed in groups, and to be memorized by name. These once memorized till they become as familiar as the multiplication table or the alphabet, and a great step has
been taken in the direction of learning all that is to be known about them. Each name then serves as a center of association and an aid to the memory.

A short glossary is appended, which will be found helpful by most readers in attaining a correct pronunciation. D. T. S.


From the Preface: The present book is a brief summary of the salient features of Human Physiology. The idea has been to present the subject in such a manner as to fix in the memory facts already learned in less limited treatises. The book is practically an abstract of standard works, and principally of those of Dalton, Foster, and Kirke. The cuts are many of them from Dalton's Physiology. Doubtful questions have often been referred to Foster, whose Text-book of Physiology is the reference book of a large proportion of the schools.

Abstracts and Selections.

Extirpation of the Rectum.—Schelkly, of Utrecht (Berl. Klin. Woch., August 8, 1892), describes a new method of extirpation of the rectum. The patient is placed in the lithotomy position, the buttocks brought to the edge of the operating table and raised, so that the intestines may fall back into the abdominal cavity. A skin incision is then made, commencing at the inner margin of the right ischial tuberosity, and carried over the coccyx to the left ischial tuberosity. The coccygeal attachment of the sphincter ani is next divided close to the bone. With the left forefinger the perirectal connective tissue is separated, and with a pair of scissors thelevator ani muscle is divided, first to the left, then to the right, as far as the limits of the skin incision. The posterior wall of the rectum at this stage of the operation usually appears in the bottom of the wound. If it is necessary to expose the pelvic organs further, it is advisable to divide the coccyx by a transverse incision. The part of the rectum to be removed is next separated from the surrounding tissues, and is then cut across transversely just above the sphincter ani externus. The rectum is seized with forceps, and further separated from its surroundings until the upper limit of the disease has been passed. In cases of carcinoma which extend high up it is necessary to open the pouch of Douglas. The part of the rectum above the seat of disease is so separated and made movable that after the diseased part has been resected it is drawn down and sutured to the lower segment which was left just above the anus, without giving rise to a state of tension. In cases where the pouch of Douglas has been opened, the aperture is closed up with sutures before the rectal segments are brought together. This method of operation is applicable, according to the author, to rectal carcinomas (even when placed high up), to syphilitic strictures, to congenital strictures, and also to some forms of pelvic growth. Schelkly himself has operated in this manner five times: three times in rectal carcinomas not high up, once in syphilitic stricture, and once in congenital atria recti. All these cases recovered. In a sixth case a carcinomatous tumor was removed from the middle of the sigmoid flexure, together with part of the mesocolon. The part of the sigmoid flexure above was brought down and sutured to the upper part of the rectum below. The patient died about three weeks after the operation. In the seventh case two inches and a half of the rectum were removed, Douglas' pouch opened, and an ovarian cyst and the fallopian tube removed. The pelvis was dropped back, and the aperture closed with silk sutures, and then the inte-time treated as described. The patient made a good recovery, and five months afterward had no signs of recurrence of the disease. The eighth case (a patient with carcinoma recti) died two days after the operation.—British Med. Journal.

Benzanilide.—Luigi Cantu (Rif. Med., August 2, 1892) records the results of the administration of this drug in a number of patients suffering from various disorders. The drug had already been tried to a certain extent by Cahn in the Children's Hospital at Strassburg, and the therapeutic effects were declared to be very similar to those of nectanilide and salicylanilide. Benzanilide has a chemical constitution closely allied to that of acetanilide, and is a white powder, melting at 161° C. and dissolving in 60 parts of cold or 7 of hot alcohol. It is insoluble in water, and with difficulty dissolves in ether. It has a slightly caustic taste, but no marked odor. It was given by the author in the following cases: 5 of typhoid, 12 of rheu-
matism, 4 of pneumonia, 3 of neuritis, 3 of sciatica, 2 of malaria, 1 of chorea and 1 of tetany. As regards the dose, the drug was at first given in the same doses as acetanilide; but this amount being insufficient, the quantity was increased first to 1 gram, and finally to 2 grams, at which amount it showed its full action. A daily dose of from 4 to 6 grams was well borne, but symptoms of intolerance began to appear after several successive days' use. The drug was given in capsules. In febrile conditions the action on the temperature is very energetic, and seems greater in proportion to the elevation of temperature. The action begins from half an hour to an hour after the drug is taken, and the maximum effect is reached after four or five hours, when the temperature again begins to rise, so that in ten or twelve hours it has reached its original level. The respiration is not affected save that occasionally it is increased in frequency. On the other hand the pulse becomes slower and softer, and its tension as measured by the sphygmomanometer shows marked diminution. This effect does not seem to be in proportion to the effect on the temperature. No disturbance of the digestive organs was observed in any of the cases in which the drug was given. The urine was not altered in quantity, density or reaction. Its color was somewhat dark, approaching a greenish tint, the color increasing in intensity after exposure to light and air. With large doses the color sometimes became nearly black. This urine yields the reaction of para-amido-sulphuric acid. As regards its therapeutic effects, the drug seems to be a simple antipyretic, and to have little other influence on the course of a disease.—Ibid.

Etiology of Granular Kidney.—Some time ago Eisenlohr reported a case of acute infective nephritis complicating enteric fever, and ultimately developing into the granular kidney. He now records (Deut. Med. Woeh., August 11, 1892) a similar result in a case of acute nephritis complicating acute pneumonia in a woman aged thirty-nine. Much albumen, red blood cells, leucocytes, and casts were found in the urine on the eighth day of the disease. A few days later there was edema. There was no cardiac hypertrophy, and the arterial tension was abnormally low. A month later she had uremic attacks, with headache, vomiting and diarrhea. A few months later the urine was found to be considerably increased in quantity, of low specific gravity, and contained very little albumen. The arterial tension was very slightly increased. Nine months after the attack of acute pneumonia she died of uremia. At the necropsy the kidneys presented the appearance of the ordinary red granular disease, both to naked eye and microscopically, and the heart was only very slightly hypertrophied. The previous existence of a chronic nephritis must of course be excluded. Nine years previously the patient was in hospital, and the urine was noted to be quite normal. The development of the granular kidney in the mean time is in the highest degree improbable, chiefly because there was hardly any cardiac hypertrophy. The slight degree of hypertrophy found corresponded to the short duration of the disease. The author has been unable to find any record of a similar case after acute pneumonia. It is well known that acute nephritis not infrequently occurs in the various infectious diseases, that it may not give rise to characteristic symptoms, and that it may thus be easily overlooked. In the above recorded case, and also in the one previously reported by the author, there was apparently a progressive shrinking of the kidney without previous enlargement. These cases are not advanced as evidence of any general operation of such a cause in the production of the granular kidney.—Ibid.

Traumatic Neurosis.—König lately discovered (Ibid., Klin. Woeh., No. 31, 1891) that the so-called “Forster's type” of visual field contraction (that is, a perimetric record is obtained by always moving the test object centripetally; next, the visual field is measured by moving the object from the center to the periphery; the latter record is smaller in every direction than the first) may occur in traumatic neurosis, and prove valuable as an objective indication of that disorder. Placzek has since ascertained that the phenomenon was present in all but one of the patients suffering from traumatic neurosis examined by him in whom there was any concentric narrowing of the visual field. More recently König (Neurolog. Cent. abt., August 1, 1892) has demonstrated enlargement of the blind spot in hysterical and periodic dipsomania on systematic tiring of the retina. His researches showed that the blind spot enlarged only toward the periphery, not toward the fovea. Fatigue effect was most apparent at the commencement of the experiment and ceased before the blind area reached the periphery of the field of vision. The enlargement was greater in the eye of the hemianesthetic side.—Ibid.

Pathological Anatomy of Uncontrollable Vomiting of Pregnancy.—Lindemann (Centralh. f. Allgem. Path., August 20, 1892) records the morbid conditions found by him in a fatal case of this affection. At the necropsy the liver and kidneys were seen to be degener-
erate here and there, and there was found noteworthy enlargement of the spleen. All other organs were healthy. The wasting of the body was inconceivable. Microscopically, changes were found in certain nerves, in the liver, spleen and kidneys. The nerves (phrenic and vagus) were in a state of parenchymatous neoplasms. In the liver, spleen and kidneys fatty changes of the cells, with cloudy swelling, and in some parts coagulation necrosis, were observed. The kidneys were most affected. Similar conditions, indicative of advanced degeneration, existed in the liver and kidneys of the fetus, the latter being the organs most diseased. Lindemann observes that a theory of inanition is inadequate to explain neuritis, splenic enlargement and profound renal changes, such as occurred in this case, in which, as a matter of fact, but slight wasting of the body was noted. The conditions observed resemble those found in cases of chronic poisoning or of infectious disease, and the author is disposed to explain them upon a theory of auto-intoxication.—Ibid.

Uterine New Growths and Metrorrhagia.—Kiréeff (Rev. de Toec. et de Gynéc. de St. Peter-bourg, May, 1892) writes on adenopapillomata of the uterine cavity. He distinguishes two forms. The first bears all the clinical characters of cancer of the body of the uterus. It is pathologically cylindrical carcinoma or adenoid cancer. The second is seen in the disea-e sometimes termed (or confounded with) “fungous endometritis.” Thus Kiréeff observed an extreme case in which the patient, a sterile woman, aged thirty-seven, suffered from metrorrhagia for four years. The uterus rose above the pubes, and was as big as the head of a child of ten. The cervix was shortened. In the uterine cavity a great number of papillomatous vegetations were found growing from the uterine wall and from the lining of the canal of the cervix. The enucleate did no good, as the vegetations, which bled freely, were too intimately associated with the deeper uterine tissues. The body of the uterus was removed by abdominal section, the cervix through the vagina. Pathologically the vegetations were myxoadenopapillomata. This disease, “although very serious, on account of the constitutional debility which it produces, does not directly endanger the patient’s life,” but Kiréeff insists nevertheless that as in the malignant form the right treatment is extirpation of the uterus.—Ibid.

Edema of the Lungs in Acute Pneumonia.—Kornfeld (Centralbl. f. Klin. Med., September 19, 1892) relates the following instance occurring at the time of the crisis, and ending in recovery. A man, aged thirty-seven, addicted to drink, had acute pneumonia, the chief physical signs of which were found over the intraspinal fossa, a favorite site when the disease affects drunkards. There was extensive herpes on both lips, and also on the soft and hard palate. In spite of considerable prostration, blueness of the face and delirium, the pulse continued to be of good force and volume. The focus of pneumonia ultimately spread over the whole of the right lung, and also to the lower lobe of the left lung. At the time of the crisis on the seventh day there was stertorous breathing, marked cyanosis and sweating. Abundant moist rales of various sizes were heard over the lungs, showing the presence of pulmonary edema. In spite of these threatening symptoms the pulse was only 100, regular, and of good volume. In three hours’ time these unfavorable symptoms began to disappear, and the patient ultimately made a good recovery. Kahane reported a case of transitory edema of the lung at the time of the crisis, which is said to have disappeared very rapidly. The cause of the edema in the above-described case was certainly not cardiac failure, but whether it was a pure angioneurotic manifestation within the area of inflammation can not be definitely decided. Whether the sustained force of the cardiac action was due to the infusion of digitalis, which had been given during the whole course of the disease, is also uncertain, although it is very possible.—Ibid.

Tracheotomy and Intubation.—Mayer (Therap. Monatsh., June, 1892) gives his experience of the operative treatment of diphtheria during the last eighteen years. Three hundred and sixteen of the cases were tracheotomies and 9 were intubations. Of the patients 166 were boys and 139 girls. Of the tracheotomies 103 were successful. Nearly all the tracheotomies were “high” operations, but 31 were “low.” As regards intubation, it is both more difficult in execution and more troublesome in its after-treatment, without conferring corresponding advantages.—Ibid.

Abscess of the Maxillary Sinus.—Grant recommends exploratory puncture through the inferior meatus with a straight trocar and steel canula three inches in length and a millimeter and a half in diameter, its proximal extremity funnel shaped to receive the nozzle of an ordinary syringe after withdrawal of the trocar, for the purpose of washing the sinus with a warm, clear, aseptic solution, usually of borax and boric acid.
THE AMERICAN PRACTITIONER AND NEWS.

Vol. 14. SATURDAY, DECEMBER 31, 1892. No. 14

D. W. YANDELL, M. D.,} - - - Editors.
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A Journal of Medicine and Surgery, published every other Saturday. Price $3.00 a year, postage paid.

This journal is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. Essays, reports of cases, and correspondence upon subjects of professional interest are solicited. The editors are not responsible for the views of contributors.

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CHOLERA NEXT SUMMER?

This very momentous question is justly claiming the attention of our National, State, county, and municipal magnates, and it is to be hoped that the agitation will not cease till the gates of our quarantine are as well barred as possible to the scourge, and every man, woman, and child in the land is awake to the necessity of practicing against it a rigid personal hygiene.

It may suit certain optimist editors and officials to protest against the cry of "wolf" before the wolf appears; but if the history of previous epidemics is any criterion for prophecy, this country may expect a visitation of cholera in the spring or early summer time. We may suspend immigration, and submit all ships and passengers coming to our shores to sanitary inspection, detention, and disinfection, so far as the great ports of entry are concerned; but there never was a quarantine that did not leak, and, if this were not so, we could hardly expect that infallibly effective measures could be taken against cholera in every port along the Atlantic and the Gulf.

It is therefore to be advised that every physician in the land shall turn missionary for the time and admonish his clientele of the only means of safety, with full instructions as to how it may be secured. What the Government is trying to do in the matter is comprehensively set forth in the following, from the pen of the editor of the New York Medical Journal:

"As was expected, the President's message to Congress refers to the arrival of cholera-infected vessels at our ports during the past summer and to the necessity of uniform quarantine regulations. He holds that under the Constitution such regulations are plainly within exclusive Federal jurisdiction when and so far as Congress shall legislate." He recommends that the whole subject should be taken under national control, and adequate power should be given to the Executive to protect our people against plague invasions. He refers to his approval of a regulation establishing a twenty-day quarantine for all vessel-bringing immigrants from foreign ports, to the danger of cholera again appearing during the coming spring, to the necessity of a suitable appropriation for dealing with the disease should it appear, and to the great need of municipal sanitation.

"This message was followed in the House by the introduction of a bill, by Mr. Payne, of Maryland, for the better protection of commerce and the general welfare, for the establishment of a national quarantine, to prevent the introduction of contagious and infectious diseases into the United States from foreign countries or from one State into another, and to establish a National Bureau of Health within the Treasury Department. This bureau is to consist of a sanitary council composed of an executive commission and an advisory council. The latter is to be made up of the Surgeon-Generals of the Army, Navy, and Marine-Hospital Service and an officer of the Department of Justice. The former is to consist of a commissioner of quarantine, a commissioner of internal sanitation, and a commissioner of vital statistics, each of whom shall receive an annual salary of seven thousand dollars. The Secretary of the Treasury is to designate the time and place for the meeting of the bureau, and it is to perform all the quarantine duties now imposed on the Treasury Department. He is authorized to accept through such steps as may be legally necessary and interstate quarantine stations and inspection ports. There are a number of other features in the bill that are similar to those of existing laws governing national quarantine.

"This bill, therefore, offers nothing new except the establishment of the bureau of health, and the appointment of three officials at fair salaries. Such officials need not, so far as the bill specifies, be physicians, and the places would probably be the refuge of politicians, while the professional work would have to be performed by the advisory council. Representative Payne has demonstrated his unfamiliarity with the necessities of a national quarantine, and his bill will undoubtedly be relegated to the oblivion that includes the vast majority of bills introduced into the House. The utmost carefulness will be necessary in carrying out the President's recommendations, and it is well that they are not very specific; best of all, they do not include an attempt to resuscitate the old National Board of Health."

Go to strangers for charity, to acquaintances for advice, and to relatives for nothing, and you will generally get a fair supply.
Notes and Queries.

Is Alcoholism Increasing among American Women?—In the last number of the North American Review an article of interest to medical men, by Dr. T. Crothers, discusses the question, "Is Alcoholism Increasing among American Women?"

He decides that inebriety among women is on the decrease. The great majority of cases of drunkenness in females are seen in connection with profound physical and mental degeneration. Female drunkards are "the mere wreckage of wornout foreign families far down on the road to race extinction. . . . Drunkenness, prostitution, and lawlessness of all forms in women are unmistakable signs of disease and early dissolution. Only a small minority of American women are found at this level. On the street at nightfall, in large cities and low circles, a certain number of inebriate women may be seen; but these are largely demented beings of foreign birth, paupers in mind and body."

Among the higher ranks of society inebriety in women is of very exceptional occurrence. Inebriate women are concealed as skeletons in households. When spirits are used for any length of time the disorders take on a periodical form, in which hysteria and other emotional symptoms are prominent. The use of alcohol in women very soon merges into some other disorder, usually drug-taking, and spirits are abandoned.

Direct alcoholic heredity always leaves the female with defective vital force and unstable brain vigor, also with weak power of control. The strain of the reproductive period brings on central exhaustion, with strong tendency to organic disease. The female neurotic may use alcohol for the exhilaration which it brings, but only until she discovers some other drug with more pleasing effects.

"The emancipation of women from the slavery of caste and ignorance, and the steady upward movement in mental and physical development will prevent any general increase in alcoholism or inebriety."

Dr. Crothers alludes to the fact that temperance reform movements are largely sustained by women. "A recent writer has said that over half a million women are active workers in the temperance field, and not one per cent of the number have been or are users of alcohol or opium. Among men a very large per cent of active temperance workers are reformed inebriates. One reason of this is, that women alcoholics and opium-takers quickly disappear from society, and shrink from all publicity or possible reference to their past. Another reason is advanced that women are the greatest possible sufferers from inebriety, and hence are more sensitive to the dangers of drink, and turn to reform movements for relief."

With regard to the consumption of patent medicines composed largely of alcohol, it has been found that the sale of such medicine in this country is confined almost exclusively to moderate and excessive drinking men; the women of this country are not large takers of patent medicines, as compared with the women of England.

"For several years past a noticeable falling off in the sale of spirits to families in cases and packages has been apparent in all large towns and cities. The family trade of stronger liquors and wines is changing to light beers and mineral waters. A rapidly increasing demand for table mineral waters has sprung up, and every drug and grocery store is supplying this want. This is limited to the homes of the upper and middle classes, and such waters are consumed by the women as well as by the men."

The writer concludes that the American woman has never been a straggler in the race-march, but is always in the van; and a wide survey of the field will show that inebriety of all forms must of necessity be diminishing.—Boston Medical Journal.

Prescribing by (Druggists) Chemists—The Daily Telegraph recently contained a report of an inquest held on a child, aged six years, which affords a striking illustration of the danger incurred by chemists who go beyond their legitimate business and venture to undertake the duties of medical men. It appeared from the evidence given at the inquest that the child was supposed to be suffering
from a cold, and her father procured from a chemist in Wardour Street a powder, which was given to the child. Next day she was attacked with severe vomiting and diarrhea. On Monday the father went to the chemist again, and on describing the symptoms was supplied with a mixture containing aromatic sulphuric acid and capsicum. It was not until Tuesday morning that a medical man was called in, and next day the child died, the post-mortem examination showing that death was caused by acute peritonitis. The medicine given was therefore highly improper, and would not have been prescribed by any one knowing the state of the child.

Mr. Troubeck, the coroner, very appropriately pointed out the danger of chemists prescribing as if they were qualified medical men, and the jury concurred with him in the opinion that it is most improper for chemists to take upon themselves such a responsibility. We fully indorse that view, and do not hesitate to express our surprise that it is not more generally recognized among chemists, who are now supposed to receive a professional education, and are, in connection with medical art, intrusted with special duties which other persons are not allowed by law to perform. At the present time it is especially desirable that the natural relations between pharmacists and medical men should be respected in practice, and we can not imagine any thing more calculated to disturb those relations with disadvantage to chemists than a continuance of the very reprehensible practice of prescribing for or attempting to treat diseases without any adequate qualification.—British Medical Journal.

A Paper Hospital.—A description of a portable paper hospital is given by the editor of the Popular Science Monthly in connection with an article by M. Emmanuel Ratoin. Its entire dimensions are sixteen by five meters, and it will accommodate twenty beds. Folded up it forms a load for three two-horse trucks. When it is set up the three trucks, the length of which is equal to the width of the building, are brought up so as to be parallel in line and a few meters distant from one another, and are arranged so that their floors, which are to form a part of the floor of the building, shall be on a level. Light T-shaped joists of iron are stretched across the intervals, supported by trestles when necessary, to receive the paper panels completing the floor. The element of the construction is a panel, usually three meters by one meter and sixty centimeters, and a tubular beam ten centimeters in thickness and composed of two walls of pressed paper four millimeters in thickness, fixed upon a frame likewise of paper. The pieces composing this frame are V- or U-shape. The panels are easily handled, and they fit at their edges so as to constitute a wall. The roof is composed of similar panels fastened in pairs. The two parallel walls are connected by a number of tie-beams composed of thin wire of galvanized iron. The floor is also composed of paper panels about a meter and a half square. By means of double walls, inclosing a cushion of air, such a building will well resist variations of temperature outside. The interior of the building is without visible framework and without posts. The building is closely jointed and might be varnished, making it easy to wash and disinfect. The windows are of wire gauze covered with a transparent coating. Ventilation is obtained through holes bored at the angle between the ceiling and the walls.—Boston Medical and Surgical Journal.

Pasteurism in the Far East.—Dr. Calmette, of the Pasteur Institute at Saigon, has issued the report of his second year of work from April, 1891, to May, 1892. During that period 48 bitten persons were treated, of whom 24 were Europeans, 16 Annamites, 4 Malays, and 4 Chinese. In 16 of the cases rabies in the animal was proved by experiment, and in all the other cases confirmation of the virulence of the bites received was obtained before the sufferers were received patients. Of the 48 treated, 16 appeared on the fifth day after being bitten, 4 from the tenth to the twentieth, 6 from the twentieth to the thirtieth, and 1 on the fortieth. In spite of the long intervals before treatment only one person died. The treatment pursued was thoroughly in accordance with the Pasteur "intensive" method; the patient receiving each morning a hypodermic injection in the right or left side alternately of
1, 2, or 3 cubic centimeters of emulsion of spinal cord in such a way that each series of weakened and strong cord emulsion was repeated three times. The bulk of the report is taken up with details of cases, and proof of the presence of rabies and hydrophobia throughout the Malay Peninsula in spite of native denial. Dr. Calmette demands protective measures as the only chance of prevention, and points to the example of Australia, where strict quarantine has succeeded in preventing hydrophobia. He declares that all that is necessary throughout Tonquin is compulsory muzzling. He cites an instance, Singapore, where in 1891 many cases of hydrophobia occurred. All the stray dogs and those without masters were killed, and only those properly registered in the municipal books were allowed to go about, and then only when wearing a muzzle of satisfactory pattern. In a few months hydrophobia and rabies ceased to exist in Singapore. Dr. Calmette, who has also charge of the Vaucine Institute, states, "Smallpox, which formerly made such tremendous ravages, has in a period of twelve years almost entirely disappeared by rigid and compulsory vaccination."

A correspondent, who has recently passed through Saigon, writes: "A visit to the Pasteur Vaccine Institute there will reward passing travelers; one admires the public spirit of the nation displayed not only by the introduction of curative measures, as evidenced by the beautiful hospitals the French have erected, but also by the practical scientific institutes which they have founded." — British Medical Journal.

The Purification of the Thames.—It is stated that steps are being taken to apply to Parliament in the coming session for an act which shall make illegal the discharge of any sewage, purified or unpurified, into the Thames between Egham and the intakes of the London water companies. There is little doubt that sewage-contaminated water is frequently drawn from the river by the water companies, but the method of filtration, simple though it be, would appear to free it to a large extent from its objectionable organic impurities. But does mere sand filtration effect the removal of organisms?

If, for example, the dejecta of a cholera patient were thrown into the river just above intake, it is hardly conceivable that the ordinary process of filtration would render such contaminated water perfectly safe to drink. Evidence is very much wanted to clear up this point. Meanwhile the advisability of taking the course it is proposed to take will hardly be disputed, and, further, it is only reasonable to expect that the water companies should bear indirectly part of the cost of the outlay necessarily involved. London Lancet.

Deaths of Eminent Foreign Medical Men.—The deaths of the following distinguished members of the medical profession abroad have been announced: Dr. Isidor Henriette, Professor of Diseases of Children; Dr. Antonio Garcia Cabrera, Professor of Anatomy in the University of Granada; Dr. Paoli, General Councillor of Salice, Corsica; Dr. Pietro Pellizzari, Professor of Dermatology and Syphilography in the Florence School of Medicine; and Dr. Emilio Fasola, privat-doect in Midwifery in Florence.

The President’s Message and Immigration.—The President in his message to Congress takes up the subject of immigration, which has been much discussed since the recent cholera fright. He strongly recommends steps for the restriction of immigration, and also that quarantine matters be placed under Federal control. Both of these conclusions are in accord with most of the opinions recently expressed by different writers, and, as far as can be learned, with the evidence being taken by the senatorial committee in session in New York.

Ourselves.—With this issue this journal closes a year of unexampled prosperity, and our subscribers and advertisers may look for evidences of it in certain new departures which our next issue will display.

To our many friends, subscribers, contributors, and advertisers we return our heart’s best thanks, with a "Happy New Year" to all, and something more than the usual New Year’s promises for loftier aims and better works.