

666
30123
427

11.7.

The Canada Lancet

*A Monthly Journal of Medical and
Surgical Science, Criticism and News.*

Volume XLV.

September, 1911—August, 1912.

JOHN FERGUSON, M.A., M.D., Tor., L.R.C.P., Edin.
AND
W. EWART FERGUSON, M.B.
Editors.

PUBLISHED BY THE ONTARIO PUBLISHING COMPANY, LIMITED
15 Wellington Street East, Toronto.

LIST OF CONTRIBUTORS TO VOLUME XLV.

- H. A. BRUCE, M.D., F.R.C.S., Toronto.
W. ALDREN TURNER, M.D., London, Eng.
J. T. GERAGHTY, M.D., Baltimore.
S. M. HAY, M.D., C.M., Toronto.
E. A. HALL, M.D., Vancouver, B.C.
J. HUNTER, M.D., Toronto.
W. M. BROWN, M.D., London, Ont.
L. H. HURD, M.D., New York, N.Y.
C. N. B. CAMAC, New York, N.Y.
E. V. FREDERICK, M.R.C.S., Peterborough, Ont.
J. P. KENNEDY, M.D., Wingham, Ont.
F. W. MARLOW, M.D., F.R.C.S., Toronto.
H. T. MACHELL, M.D., Toronto.
N. T. MACLAURIN, M.D., Toronto.
JAS. A. MCLEOD, M.D., Buffalo, N.Y.
J. K. MCGREGOR, M.D., Hamilton.
N. A. POWELL, M.D., Toronto.
R. H. PATERSON, M.D., Hamilton.
L. G. ROWNTREE, M.D., Baltimore.
R. D. RUDOLF, M.D., Toronto.
G. S. RYERSON, M.D., C.M., L.R.C.P., Toronto.
THOS. A. WOODRUFF, M.D., Chicago.
D. J. GIBB WISHART, M.D., Toronto.
J. A. TEMPLE, M.D., M.R.C.S., Toronto.
J. L. DAVISON, M.D., Toronto.
ALLEN BAINES, M.D., Toronto.
W. J. MACDONALD, M.D., St. Catharines, Ont.
JOHN FERGUSON, M.A., M.D., Toronto.
E. BRYCESON, M.A., M.D., Toronto.
W. E. FERGUSON, M.B., Toronto.
A. GROVES, M.D., Fergus, Ont.
N. KUHNER, M.D., Eisenach, Hungary.
SIR JAMES GRANT, M.D., F.R.C.S., Ottawa.
A. MALLOCH, M.D., Hamilton.
F. L. GRASSETT, M.D., F.R.C.S., Toronto.
J. STEWART, M.D., Halifax.
SIR H. C. CAMERON, Glasgow, Scotland.
H. O. MARCY, M.D., Boston, Mass.
ST. GEORGE BALDWIN, M.D., Toronto.
I. H. CAMERON, M.D., F.R.C.S., Toronto.
JAS. S. SPRAGGUE, M.D., Perth, Ont.
C. STEWART WRIGHT, M.B., Toronto.
A. H. PERFECT, M.B., Toronto.
F. C. TREBILCOCK, M.D., Toronto.
P. G. GOLDSMITH, M.D.C.M., Toronto.
A. J. MACKENZIE, B.A., M.B., Toronto.

INDEX TO VOLUME XLV.

A.

Abdominal Surgery, 43.
 Alcohol in Medicine, 163, 593.
 Asthma, Nature and Treatment of
 Bronchial, R. D. Rudolf, 184.
 Arterio sclerosis, 200.
 Academy of Medicine of Toronto, 234,
 731.
 Asylum Accommodation in Toronto,
 721.
 Alvarenga Prize, 313.
 Abdominal Incisions, 376.
 Appeal to young men in medicine, John
 Hunter, 415.
 Addresses re late J. F. W. Ross, various
 writers, 327.
 Appendicitis, pathology of, N. T. Mac-
 laurin, 21.
 Appendix, 42, 137, 204, 206, 295, 597,
 599, 692.
 Anaesthetic, choice of, 133, H. M. in
 obstetrics, 448; discovery of, 730.
 Asylum fire, 2.
 Alcoholics, 407.
 Appendicitis, report of a case of, J. P.
 Kennedy, 419.
 Arthritis, 432.
 Air in public schools, 471.
 Amusements, 486.
 Assyrian medicine, 489.
 Appendectomy on shipboard, E. Bryce-
 son, 503.
 Ascites, 506, 588.
 Acne, 593.
 Act to amend the Medical Profession
 Act, 628.
 Ancient surgical operations, 717.
 Ante-mortem statements, 728.
 Arthritis deformans, 774.
 Association for Prevention of Tuber-
 culosis, 865.
 Anaesthetics, some remarks on, W. E.
 Ferguson, 573.
 Asylum at Whitby, 885.
 Address, H. A. Bruce, 889.

B.

Bacillus aerogenes capsulatus, 27.
 Baines, A., address on Dr. Ross as a
 practitioner, 334.
 Bacillus coli in the urinary tract, 424.
 Blood pressure, 443, 513.
 Bryceson, E., appndectomy on ship-
 board, 503.
 Bath hot springs of, 716.
 Barton, Clarissa H., 653.

Biliary disease, 133.
 Bruce, H. A., Address by, 889.
 Birth rate, 8, 245.
 Blindness, prevention of, Thos. A.
 Woodruff, 9.
 British Insurance Bill, 5, 632, 718.
 Brown, W. M., success in cataract op-
 erations, 192.
 Bleeding in brain operations, 374.
 Balsam of Peru and wounds, 601.
 Bingham, G.A., surgery since Lister,
 668.
 Baldwin, St. George, personal reminis-
 cences of Lord Lister, 672.
 Book Reviews, 54, 144, 226, 310, 390,
 459, 546, 618, 713, 791, 858, 943.
 Byron, Lord, last illness of, 828.
 Bartholin cysts, 840.

C.

Cancer, 8, 42, 45, 71, 213, 296, 324, 366,
 520, 778.
 Canadian National Exhibition, 70.
 Cataract operations, success in, W. M.
 Brown, 192.
 Chancre, chanroid and herpes pro-
 genitalis, 209.
 Cervix, tuberculosis of, 212.
 Consumption, 2, 7, 130, 147.
 Cough, treatment of, 127.
 Circulation, 284.
 Cardiac irregularities, 285, 371, 510.
 Cornea, foreign bodies in, 298; wounds
 of, 440.
 Christian Science, 322, 554, 637.
 Camac, C. N. B., out patient clinic,
 aims and possibilities, 341.
 Common duct, surgery of, 375.
 Cystitis, 432.
 Choriorhepithelioma, 452.
 Cosman, Jas., gifts to charity, 551.
 Canadian Health Association, 551, 563.
 Canada's consumption of whiskey and
 cigars, 559.
 Care of the child, 568.
 Carditis, rheumatic, 592.
 Cures that would be miracles, 647.
 Commission for asylums, 647.
 Cameron, Sir Hector, a memory and ap-
 preciation of Lord Lister, 664.
 Cameron, I. H., influences of researches
 of Lister and Pasteur on surgical
 pathology, 674.
 Case of A. H. Garratt, 732.
 Chinese medicine, 807.
 Condylomata, 840.

D.

- Davison, J. L., address on Dr. Ross as a man, 331.
 Dislocated testicle, with acute symptoms, E. V. Frederick, 764.
 Discoveries, 566.
 Dispensary, The, 242, 630.
 Delirium tremens, 200.
 Decapsulation of kidney in chronic Bright's disease, 132.
 Diabetes mellitus, 37, 196, 201, 425, 771.
 Diazo reaction, 69.
 Doctors in the House of Commons, 83.
 Dysentery, treatment of, 128.
 Druggist's vocation, passing of, John Hunter, 189.
 Distribution of tuberculosis and cancer in Paris, 524.
 Death rate from diphtheria, 529, 635.
 Death of physicians in 1911, 637.
 Dominion registration, 645.
 Digitalis, 690.
 Diseases of pituitary body, H. Campbell Thompson, 765.
 Demonstration by comparison, 796.
 Detention Asylum, 884.
 Drug habit, 885.

E.

- Editorial, 1, 81, 163, 241, 321, 401, 561, 641, 721, 801, 881.
 Endocarditis, 131.
 Epilepsy, 202.
 Erysipelas in general hospitals, 321, 402.
 Electricity in abdominal surgery, Sir Jac. Grant, 654.
 Ergot, value of, 688.
 Eugenic congress, 730.
 Extra uterine pregnancy, diagnosis of, 30, 843.

F.

- Field and hands in surgery, 206, 212.
 Fibroids, uterine, 214.
 Fallopian tube, cancer of, 296.
 Faith healing, 402, 487.
 Frederick, E. V., spinal analgesia, 410; dislocated testicle, 764.
 Federal Department of Health, 482, 803.
 Fee splitting, 483, 620.
 Ferguson, John, imperforated rectum, 502.
 Ferguson, W. E., some remarks on general anaesthesia, 573.
 Feeble minded, 727.
 Few reflections, Jas. S. Sprague, 757.
 Fraudulent advertising, 805.
 Fly, The, 81, 154, 725, 949.
 Fractures, 43, 134, 203, 206, 422, 695.

- Food, exposure of, 147, 473.
 Furuncles, treatment of, 205
 Fine or operation, 886.

G.

- Gall bladder, 44.
 Goitre, 199, 511.
 Gastric hemorrhage, 205.
 Gastric ulcer, 210, 432, 601, 834.
 General Hospital of Toronto, 243.
 Gonorrhoeal endometritis and cervicitis, 294, 839.
 Gastric neurosis, 431.
 Groves, A., prostatectomy, 572.
 General anaesthesia, some remarks on, W. E. Ferguson, 573.
 Gouty albuminuria, 590.
 Grant, electricity in abdominal surgery, 654.
 Grassett, F. LeM., Lord Lister in Edinburgh, 658.
 Gynaecological hints, 696.
 Gift to Ingersoll, by Dr. Carroll, 797.
 Gynaecology and abdominal surgery, S. M. Hay, 136, 210, 294, 696, 777, 839.

H.

- Hay, S. M., M.D., C.M., removal of a calculus from pelvic portion of ureter, 109; rupture of intestine, 408; urethro-vaginal fistula, 677.
 Hernia, radical cure of in infants, 703.
 Hall, E. A., membranous pericolicitis, 174; Ileosigmoid anastomosis in intestinal autotoxicosis, 568.
 Hurd, L. M., nasal accessory sinuses, 194.
 Heart, examination of, 196.
 Health of different occupations, 807.
 Heterophoria and headaches, G. S. Ryerson, 250.
 Hospital Act of Ontario, 645.
 Hospitals, fireproof, 321, 484.
 Hospitals and the admittance of patients, 315.
 Hospital and the young physician, 230.
 Hospital associations, 166, 552, 563, 643.
 Hospitals, refuges of Ontario, 807.
 Hunter, J., passing of druggist's vocation, 189; an appeal to young men in medicine, 415.
 Health map of England, 870.
 Hepatopexy, 602.
 Hemophilia, 422.
 Hemorrhoids, 438, 535.
 Hyperchlorhydria, 507.
 Headaches, 531.
 Hyperhydrosis, 39.
 Hygiene in public schools, 636.
 Headache powders, 652.
 Health districts of Ontario, 811.
 Heredity, 829.

Haemoptysis, 832.
Headaches, 507.
Health officers for new districts, 875.

I.

Infants in institutions, 445.
Insurance Bill, British, 5, 632, 718.
Infant mortality, 7, 397, 726, 810.
Intestinal stenosis, 45.
Insane poor, 169.
Inguinal hernia and appendicitis, 208.
Inoculations, anti-typhoid, 233, 291, 403, 591.
Infantile paralysis, 434.
Intussusception, treatment of, 450.
International Medical Congress, 462, 629, 874.
Illegitimate births and mortality, 471.
Imperforated rectum, John Ferguson, 502.
Insanity in its legal aspects, 561.
Insanity as a defence for crime, 562.
Inebriates, 566.
Ileosigmoid anastomosis in intestinal autotoxiosis, E. A. Hall, 569.
Influences of researches of Lister and Pasteur on surgical pathology, I. H. Cameron, 674.
Insomnia, 684.
Iliac pain in women, 779.
International collective investigation on ozaena, D. J. G. Wishart, 824.
Insanity, prevention of, 833.
Intestinal obstruction, post operative mechanical, 844.

J.

Jackson, Hughlings and Joseph Bell, 241.
Jaundice, pancreatic and hemolytic, H. D. Rolleston, 582.
Judgment, important, 951.

K.

Kennedy, J. P., report of a case of acute appendicitis, 419.
Korsakow's syndrome, 40.
Kidney, aborted, 775.

L.

Loss from typhoid fever and tuberculosis, 248.
Liverpool school of tropical medicine, 406.
Labor, onset of, 446.

Lister, passing of, 481, 595, 641.
Lunacy in Ireland, 557.
Laryngeal cough, 640.
Lister, remarks on, by N. A. Powell at Academy of Medicine, 655.
Lister in Glasgow, A. Malloch, 656.
Lister in Edinburgh, F. LeM. Grasset, 658.
Lister, a memory and appreciation of, Sir H. Cameron, 664.
Liquor, sale of, 69.
London medical graduates, 797.
Laryngology and rhinology, P. G. Goldsmith, 739, 525.
Lung ventilation under chloroform, 830.
Locomotor ataxia, 837.
Lunacy, 167.

Mc.

McLeod, J. A., diagnosis of extra uterine pregnancy, 130.
McGregor, J. K., aids in surgical diagnosis of kidney and bladder, 104.
McGill medical graduates, 877.

M.

Maclaurin, N. T., pathology of appendicitis, 21.
Machell, H. T., report of two cases of sexual precocity, 171.
Membranous pericolicitis, E. A. Hall 174.
Myocardial degeneration, 770.
Metal trades and dental clinics, 148.
Medical preparations, 79, 157, 237, 317, 399, 478, 559, 638, 720, 799, 879, 951.
Medicine, A. J. Mackenzie, 37, 127, 196, 284, 365, 422, 506, 588, 684, 770, 827.
Miscellaneous medical news, 60, 146, 228, 312, 397, 462, 550, 626, 716, 796, 861, 945.
Medicine, the profession of, 167.
Medical treatment of school children, 832.
Milk, 233, 291.
Monocular diplopia, G. S. Ryerson, 826.
Mayor of London, Eng., 235.
Morrison, Rutherford, treatment of general septic peritonitis, 256.
Medical fees, 323.
Manitoba medical graduates, 879.
Marlow, F. W., an address on the contributions to medical literature by late Dr. Ross, 337.
Miscarriage, treatment of, 449.
Macdonald, W. J., ulcer of stomach and duodenum, 490; upper abdominal surgical disease, 734.

Medical expert testimony, 556.
 Malloch, A., Lister in Glasgow, 656.
 Marcy, H. A., personal reminiscences of Lord Lister, 669.
 Medical inspection of schools, 718.
 Medical Profession and Insurance Act, 718.
 Medical schools of Europe, 811.

N.

Nasal accessory sinuses, L. M. Hurd, 194.
 Nobel prize, 316.
 National Medical Union, 474.
 Needless loss of life, 551.
 Nevitt, R. B., Pre-Listerian surgery, 671.
 Noguchi's luetin reaction, 774.
 Nurse's convention, Hamilton, 873.
 Neurology some aspects of, W. A. Turner, 912.

O.

Obstetrics and diseases of children, 315, 443, 527, 699.
 Olive oil in post-operative nausea, 431.
 Obesity, treatment of, 469, 507.
 Ontario, Medical Association, 484, 563, 868.
 Osteopaths, qualification for 649, 801.
 Oesophagus, malignant structure of, 526.
 Opium traffic, 326, 472.
 Omental cysts, 132.
 Ontario Medical Council, 1, 60, 82, 163, 246, 312, 463, 881, 945.
 Optometrical convention, 82.
 Ophthalmology, F. C. Trebilcock, 298, 439.
 Out-patient clinic, aims and possibilities, C. N. B. Camac, 347.
 Optic neuritis, 439.
 Orr, Dr., at Varsity, 550.
 Omental cysts, 603.
 Oedema of lungs, treatment of, 689.
 Osteomyelitis, 733.
 Obituary: D. P. Lynch, 57; L. A. Trudeau, 58; J. A. Scott, Jas. Johnson, W. McCamus, 59; G. Hetherington, H. M. Church, H. Scanlan, 59; A. Stewart, 143; E. Adams, A. Poole, L. H. Morse, 144; L. J. Belliveau, C. M. Lang, 144; A. H. Ferguson, 223; F. Hall, 224; Chas. Frow, W. C. Little, 225; G. Wyld, J. C. Darvie, 225; S. M. Weaks, W. Armstrong, 226; J. F. W. Ross, 306; W. L. Pirt, 309; A. F. Pringle, W. G. Walker, T. H. Thornton, 310; W. Caw, 388; J. P. Bruce, 389; H. Stevenson, J. E.

Tyndall, 389; S. M. Westman, 458; W. Taylor, 545; J. D. Thorburn, 615; T. A. Scholefield, 615; J. W. Wright, L. L. Palmer, 616; J. J. Lane, R. P. Boucher, J. P. Menzies, 617; J. C. Cameron, 618; H. L. Chaplin, 711; W. D. McLaren, A. A. McCrimmon, Mary L. Morris, L. Potter, 711; Alfred Pain, 712; R. J. Butterfield, Robert Tracey, 712; D. W. Carroll, 788; F. Yorston, C. B. McQuesten, J. S. Munger, R. Murray, G. D. Maxwell, E. P. James, J. W. Clemesha, 789; J. W. Smith, R. Tracey, W. D. McNab, G. Rymer, F. Alexander, 791; D. Clark, 856; J. Stewart, J. W. Lane, G. Burns, 858; J. H. Wilson, 940; I. Odium, E. Gauvreau, F. C. Boyd, H. Walker, R. E. Brett, F. W. Seifert, 941; J. Baxter, D. Muirhead, T. D. White, N. Cunningham, T. R. Gates, W. J. Johnston, 943.

P.

Paterson, R. H., bacillus aerogenes capsulatus, 27.
 Phenolsulphonophthalein test for estimating renal function, L. G. Rowntree and J. T. Geraghty, 85.
 Plague in China, 6.
 Personal and news items, 48, 138, 218, 299, 382, 453, 536, 606, 704, 782, 845, 929.
 Patent medicines, 147.
 Presidential address, Academy of Medicine, N. A. Powell, 176; on late J. F. W. Ross, 327; on Lord Lister, 655.
 Purulent pleurisy, 208.
 Pregnancy prolonged, 215.
 Placenta prævia, 217, 699.
 Puerperal infections, 217, 452, 603.
 Proprietary drugs, 232.
 Physician's fee, 232; making of, 398.
 Powell, N. A., address, academy of Medicine, 176; address on late Dr. Ross, 327.
 Proctological Society, American report of papers, 111.
 Provincial Board of Health, 66, 149.
 Psychoses, post-anæsthetic, 47.
 Psoriasis, 130.
 Public Health Association of Canada, 236.
 Peritonitis, treatment of, R. Morrison, 256.
 Peritonitis, 296, 375, 841.
 Poisons, storage of, 315.
 Pylorospasms in infants, 365.
 Prostatectomy, 377.
 Practical points obtained from Mr. Guy French's clinique, 379.

- Phrenic nerve, 405.
 Post nasal catarrh in children, 427.
 Placenta, separation of, 447.
 Perpendicular pelvis, 450.
 Public and medical profession, 468.
 Past, present and future, 485.
 Pancreatitis, 514, 773.
 Pleuro-pulmonary surgery, 517.
 Paralysis of third nerve, 525.
 Pasteurized milk, 556.
 Prostatectomy, A. Groves, 572.
 Pleurisy and pulmonary tuberculosis, 588.
 Public Health Act Revision, 634, 649.
 Personal reminiscences of Lord Lister, H. A. Marcy, 669.
 Pre-Listerian surgery, R. B. Nevitt, 671.
 Personal reminiscences of Lord Lister, St. Geo. Baldwin, 672.
 Psychology and therapeutics, 689.
 Pyelitis, 697.
 Pressure inunction in chronic hyperplastic conditions of the eye, G. R. Ryerson, 762.
 Paralysis, rapidity of, 777.
 Pyosalpinx in the puerperium, 779.
 Passive congestion of the liver, 827.
 Parathyroid glands, 829.
 Peritoneal adhesions, 842.
- R.
- Radium Institute, 69.
 Rowntree, L. G. and J. T. Gerachty, test for estimating renal functions, 85.
 Race deterioration, 244.
 Ryerson, G. S., heterophoria and headaches, 250; monocular diplopia, 826; pressure inunction in chronic hyperplastic conditions of the eye, 762.
 Rheumatism, 290.
 Ross, J. F. W., as a surgeon, by J. A. Temple, 329; as a man, by J. L. Davison, 331; as a practitioner, by Allen Baines, 334; contributions to medical literature, F. W. Marlow, 337.
 Rupture of intestine, S. M. Hay, 408.
 Revenue and disease, 562.
 Resistance of nephrectomized patients, 692.
 Results of sanitation, 798.
 Rheumatoid arthritis: coincidence with visceral ptosis and value of X-rays in aetiology, C. S. Wright, 812.
 Rudolf, R. D., nature and treatment of bronchial asthma, 184.
- S.
- Sanitarium treatment, value of, 149.
 Sexual precocity, report of two cases,
- H. T. Machell, 171.
 Sex problem, 244.
 Salvarsan, 249, 367, 422, 435, 691.
 Stomach inflation, 287.
 Scarlet fever, 289.
 Stomach, gas in, 365.
 Skin antiseptics, 373.
 Servetus, Michael, 397.
 Spinal analgesia, E. V. Frederick, 410.
 Sensibility of peritoneum and viscera, 437.
 Squint, 441.
 Students, conduct of, 168, 247.
 Surgery, A. H. Perfect, 41, 132, 203, 373, 431, 514, 593, 691, 834.
 Surgical diagnosis of kidney and bladder, aids in, J. K. McGregor, 104.
 Sanitaria for Newfoundland, 553.
 Surgery, the maker of, 595.
 Surgery since Lister, 668.
 Simcoe Hall, 719.
 Shields, The Misses, 724.
 Seventeenth century surgeon and his fee, 727.
 Sprague, Jas. S., a few reflections, 757.
 Sterility secondary to adnexa disease, 780.
- T.
- Tuberculosis, 2, 7, 130, 147, 198, 401, 286, 291, 428, 488, 512, 554, 627, 724, 808, 888.
 Thyroid gland and female generative organs, 136.
 Tetanus, 208, 436.
 Thoughts of an elderly physician, 231.
 Tachycardia in children, 249.
 Trip abroad, D. J. G. Wishart, 252.
 Temple, J. A., address, Dr. J. F. W. Ross as a surgeon, 328.
 Typhoid fever, 371, 527, 567.
 Trachoma, 442.
 Toxæmia of pregnancy, 444.
 Tobacco, 472.
 Thyroid disease, 508.
 Therapeutic notes, 531.
 Titanic disaster, 650.
 Therapeutic treatment of tumors through the circulation, A. Von Wasserman, 678.
 Tonsils, bacteriology of, 722.
 Toronto and the city poor patients, 809.
 Toronto General Hospital, 810, 886.
 Tupper, Sir Chas., 882.
- U.
- Uterus, treatment of antelexion of, 211.

- Uterus, retrodisplacements of, 777.
 University of Toronto, medical results, 228, 875.
 Urine in pregnancy, 445.
 Ulcer of stomach and duodenum, W. J. Macdonald, 490, 776.
 Urethro-vaginal fistula, S. M. Hay, 677.
 Upper abdominal surgical disease, some points in differential diagnosis, W. J. Macdonald, 734.
 Uterine douche, 778.
 Uterine curettings, 841.
- V.
- Version, external and vaginal, 84.
 Vomiting, 197, 216.
 Vital statistics of Ontario, 245, 312, 396, 470, 475, 651, 692.
 Vaccination, 233, 291, 371, 591, 651.
 Venereal diseases, 372.
 Vital statistics of Toronto, 950.
- Vitality of bacteria, 627.
 Victorian Order of Nurses, 647.
 Vivisection, 872.
- W.
- Woodruff, Thos. A., prevention of blindness, 9.
 Water pollution, 165, 231, 405.
 Wishart, D. J. Gibb, notes on a trip abroad, 252; investigation on ozaena, 824.
 Widal's satiless regimen, 289.
 Whooping cough and its treatment, 368. Dr. Kuhner, 580.
 Women psychologically considered, 721.
 Western University, London, 804, 879.
 Wright, C. S., rheumatoid arthritis, its coincidence with visceral ptosis, 812.
 Weston sanitarium, 861.
 Water drinking and drinking water, 950.
 Whooping cough, 950.
-

The Canada Lancet

VOL. XLV. TORONTO, SEPTEMBER, 1911 No. 1

EDITORIAL.

THE ONTARIO MEDICAL COUNCIL.

The annual meeting of the Ontario Medical Council will pass into history as a record meeting. From the standpoint of the CANADA LANCET, the meeting was a most gratifying one, as the council adopted, or took steps for the future adoption of everything we have been urging for the past two years.

In the first place we directed attention to the fact that the council was spending annually a large sum in excess of its income, according to the political economy of Wilkins Micawber, it is easy to see where this would land the council. Last session the expenses were cut down by publishing an abbreviated announcement, and paying the members for their actual time in attendance. This year the plea for economy was a dominant note throughout the entire sessions.

And the point that we have steadily advocated was the folly of so many examinations. We never could see the need for rushing a student from the university halls before the ink on the paper was dry to another hall to write on a similar set of questions on the same subject. We recall to mind the wonderful words of Shakespeare where he speaks of excess, and think they admirably suited this foolish practice. But a better day for the student has come, and

Outworn ideals are passing fast away,
Beyond its buried past the world has ranged.

and so

New influences shape its trend to-day.

This examination work of the truly "wasteful and ridiculous excess" type has taken its departure; and the like the sultan in the poem it

Abode its hour or two and went away.

Another reform we have contended for is that of cutting the council down in numbers. There is absolutely no need for so large a body to manage the medical affairs entrusted to the council. It is pleasing to note that the council took the matter up and appointed a committee to report on the best means of effecting the requisite reduction. The gen-

eral opinion is that there should be nine territorial members, two homœopathic representatives, and only one from each university actually engaged in teaching, which mean three of this class. Not one word of defence can be offered for the present system whereby a representative is granted to the University of Ottawa, Trinity University, Victoria University, Trinity Medical College, and the College of Physicians and Surgeons, of Kingston. These bodies either never taught or have ceased to teach medicine.

We trust that the medical council will not shrink in the full performance of its duty. It has become a case of "Mend or end."

The council also did itself credit in the fearless manner in which it took up the cases of those accused of "infamous and disgraceful conduct in a professional sense." Two names were struck off the register. One was acquitted. Two were restored to the rights of good standing. The case of one was deferred to next meeting, and another had his name sent on to the discipline committee. This sort of work will prove wholesome.

We wish to mention two or three names for special commendation: Dr. E. Ryan, of Kingston, took a very leading part in the work of reform, such as doing away with the primary and intermediate examinations; and the reduction in the size of the council. Dr. Spankie, of Wolfe Island, rendered some signal assistance in the right direction, and Dr. Gibson, the president, was on the right side. Dr. E. E. King, of Toronto, should not be forgotten. We missed Dr. F. N. G. Starr, but some of the work of this year is on the foundations laid by him in past years. Dr. A. T. Emmerson, the new member from Goderich, brought to the meeting new and progressive methods. We were glad to see our old friend, Sir James Grant, at the meeting and giving the benefit of his years and experience to the advancement of needed changes. Dr. J. MacCallum, of the University of Toronto, was true to his former record of supporting whatever made for the benefit of the medical profession. While we cannot mention all that took a prominent part in the discussions, we are glad to be able to state there were no obstructionists this year.

CONSUMPTION AND ITS CAUSES.

The Royal Commission on Tuberculosis has issued its final report. The report is a welcome and valuable one, and goes a long way towards settling once and for all a number of questions on which there has been considerable doubt.

In the first place the commissioners are not in a position to state whether the disease in man and lower animals is one and the same. They admit that this phase of the subject calls for further study.

The commissioners have no difficulty in coming to the conclusion that bovine animals may be infected by the human form of the disease. On the other hand man, even adults, may be infected by the bovine type of the disease, and acquire the pulmonary form from this source. Whether the bacilli are the same in man and the bovine animals, these bacilli will live respectively in man and bovine animals. This was the point that the late Professor Koch disputed in his famous London address in 1901. The Royal Commission has now set at rest this doubt by declaring that man and the bovine animals may infect each other.

The report then goes on to emphasize the need for care in milk and food, especially such as is intended for consumption by infants and children. This only confirms what in many quarters had long been suspected.

In by gone ages and in many countries the suspicion has existed that the disease could be communicated. This went to the enactment of very stringent regulations during the 15th and 16th centuries in some countries in Europe. In the early part of the last century, Boyle and Laennec, of France, came to the conclusion that there was some common tuberculous substance that could build up the tubercular tumors.

In 1882, came the great discovery of Robert Koch that the disease was due to a bacillus, the form and constant presence of which he pointed out. He came to the conclusion that the bacilli as found in man and bovine animals are two distinct varieties. The commissioners are not able to dispute this, but they are able to negative the view of Koch that the bovine variety would not infect man, and vice versa. The most careful investigation proved that in a number of the cases studied, the human sufferers were affected with the bovine type of bacillus.

Coming to lupus it was found that in about one half the cultural characteristics were human or bovine respectively. In other words eight were of the human type of bacillus, and nine of the bovine type.

Swine are infected by the three varieties, namely, human, bovine, and avian. Of these the bovine predominated.

A very interesting feature of the report is the statement that mixed infection occurs. Persons were studied in whom both the human and the bovine types were found; and swine were found infected with the human and the avian. In some instances the bacilli were found in a transitional stage, especially in lupus and in equine tuberculosis.

In adults it is very rare to find the bovine type of bacillus in pulmonary tuberculosis. In the abdominal forms the bovine is found in one half of the cases of children. The conclusion is arrived at that a considerable number of the cases of tuberculosis in children is of bovine origin. Many cases of cervical gland tuberculosis in children are also bovine in type.

THE HAMILTON ASYLUM FIRE.

The fire in the Asylum for the Insane at Hamilton once more raises the question of the character of these buildings. It must be remembered that in Toronto, London, and Hamilton there are city fire departments that can render prompt and efficient assistance. This is not so in Woodstock, Orillia, Penetang, Cobourg, and Brockville.

Hospitals are full of patients that are helpless physically, and asylums with those that are deranged mentally and may act very strangely in the event of panic. No one knows in advance what they may do.

We have often called attention to the importance of having all such buildings of an absolutely fire-proof character. It is no use to point to a fine stone or brick wall, while the studding, joists, floors, etc., are made of wood. Such a building is only a frame one in a stone or brick wall. It is quite as unsafe as any an ordinary frame building.

The number of inmates in the ten asylums of Ontario are over 6,500. These are housed in buildings, none of which are of a fire-proof construction. From time to time fires have occurred in our asylums. Last fall, in the cold weather, a most disastrous one happened in the Brandon asylum, with the loss of two lives, and complete destruction of the building. In 1886 there was a severe conflagration in the Hamilton asylum.

The accounts of the recent Hamilton fire state that the scene was a most horror inspiring one. Hundreds of patients were rushing about in the buildings and screaming with terror. There were some instances of most remarkable bravery on the part of the attendants, the firemen, and some volunteered help.

The loss of property is bad enough, but the loss of eight lives of these unfortunate inmates is very sad. We are not saying a word of harsh criticism against any one. It is only of recent years that fire-proof buildings have come into general use in these sort of public institutions, and the government is not to blame in such an event as the Hamilton fire with its loss of life.

What we wish to impress on the minds of all is the necessity of converting all the asylums into fire-proof buildings with the least delay possible. One section at a time could be changed, and in a short time the entire series of asylums would be rendered safe. The people would gladly stand the cost. The wooden partitions and floors could be replaced by terra cotta and steel. All new buildings should be of the most approved design. Small fires are frequently occurring, but by good fortune and energetic action these are controlled, and no serious

damage done. But a time comes when it leaps beyond control and the words of Shakespeare come true:

A little fire is quickly trodden out;
But, being suffered, rivers cannot quench.

Away goes the building with one, two, a dozen, or, it may be, a hundred lives. The whole province is guardian to those insane, and must provide them with safe homes. Such influential papers as the *Globe*, *Mail*, and *Star* are now taking this view.

THE BRITISH INSURANCE BILL.

For some time the medical profession in Britain has been very much exercised over Mr. Lloyd-George's National Insurance Scheme. It is not necessary to go into the details of the bill as to the payments that are to be made to the workmen covered by the bill. There are some features, however, that call for comment.

In the first place every workman who's average income does not exceed £3 per week is entitled to the benefits of the act. These benefits are: Free medical attendance; the sum of 30 shillings in maternity cases; help in cases of tuberculosis; sick allowance of 10 shillings a week for three months, and 5 shillings thereafter to age 70, when the person goes on the old age pension; women to receive 7 shillings and six pence for three months and thereafter, the same as men; persons under 16 years not to receive sick pay, but to receive free doctor and the use of sanatoria.

The act recognizes contract practice. This is the cause for much difference of opinion. The bill fixes 6 shillings a year as the rate to be paid the doctor for his attendance on each person entitled to his services. The friendly societies in Great Britain have been paying about 4 shillings. This appears to have been taken by Mr. George as a guide in framing his act.

The medical bodies in Britain have contended that the Insurance Commission, the Advisory Committee, and the Local Health Committees should serve medical men. These bodies have also contended in the interests of the medical profession, that the administration of the funds should not be handed over the various friendly societies. It is also contended that everything should now be clearly set forth, and that no detail ought to be left to be interpreted by "Board Regulations."

The bill also sets forth that £1,500,000 will be devoted to erection of sanatoria for tuberculosis, and £1,000,000 annually for their maintenance. They who come within the provisions of the bill are entitled to the advantages of treatment in these sanatoria.

It is stated that about 7,500,000 persons will come within the meaning of the act. The charges are fixed for men at 4 pence on the insured, 3 pence on the employer, and 3 pence from the national revenue per year. In the case of women, they are charged 3 pence, while the employer and the government contribute the same as in the case of men.

All those who receive less wages than that laid down in the act as the minimum, must take out this protection, cost of which is distributed over the wage earner, his employer and the general taxpayer in about equal amounts.

The many friendly societies in Britain are much opposed to the bill, as it strikes right at the work they have been so long doing. In the case of these societies the payments are voluntary and entirely from the insured. This gives the government plan a decided advantage. And their feature has developed during the discussion, namely, there is far from a kindly relationship between the medical profession and these friendly societies. It would appear that the societies have made the club or contract form of practice very onerous to the medical profession; and now the latter has fully determined that the funds of the National Insurance Scheme must not be controlled by these societies.

THE PLAGUE IN CHINA.

When the plague assumed serious proportions in China, the Government of that country called together representatives of the other nations and thus created an international commission on the disease.

These commissioners found that the only type of the disease was the pneumonic, or combined pneumonic and septicemic form. It was accepted by the commission that the origin of the epidemic was the tarabagan, or sort of squirrel, which is very prone to the disease. This animal is subject to a chronic form of the plague, and in this way they are very liable to spread the disease.

The commission found only a few rats infected, and one dog. There was evidence to show that a mule had died of the disease. When proper steps were taken, the disease soon showed signs of abatement. The Russian, Japanese, and Chinese authorities combined in these efforts. The bacillus did not lose any of its virulence as the time went on.

The disease was spread by persons ill, or incubating the disease. It did not appear to spread to any appreciable extent by clothing, merchandise, or vermin. The breath did not seem to spread it, unless there were particles of sputum from coughing. Sputum is infective while wet, and may be carried in this condition. It was made clear that the human host

is the main factor in the spread of the disease, and that rather close contact is a condition in the spread.

A most interesting lesson from the work of this commission is that nations are combining to stamp out such infectious diseases, as formerly proved such terrible scourges to the human race. This bodes much good for humanity. On this commission two American physicians, Dr. Teague and Strong, took a prominent part.

When one looks into the history of the plague and recalls how it would sweep over Asia and Europe, devastating these lands, it is most gratifying to see how science has mastered the situation and laid down the method of controlling its spread. Truly the skilled physician is greater than armies for the country's weal.

DR. R. E. WODEHOUSE AND INFANT MORTALITY.

Dr. Wodehouse is doing good work for the infants of Fort William. We have much pleasure in referring to this subject because of its value, and because it shows what might be accomplished elsewhere. As the result of this good work, the infant mortality has fallen from 33 last year to 12 this year.

A very carefully prepared circular was sent out to the public. In this circular full instructions are given regarding the care of infants. Especial attention is given to the feeding of infants. Other towns and cities should do likewise.

DRINK AND CONSUMPTION.

The time was, and easily within the memory of a goodly number of medical men, when the belief was quite common that the free use of alcoholic beverages warded off consumption. That notion is now dead.

In ten years in England and Wales, consumption has fallen 19 per cent., in Scotland 24 per cent., in Ireland 24 per cent., in Germany 18 per cent., in London 30 per cent., in Berlin 24 per cent., and in Paris only 3 per cent. In 50 years tuberculosis has declined fully 50 per cent. for all ages, and from birth to 25 years of age by at least 70 per cent.

Coincident with this decline in the death rate from consumption, there is a fall in the quantity of stimulants consumed. Ten years ago the drink bill in Britain was £4 12s. per head, and in 1910 it was £3 8s. 11d., or a fall of 25 per cent. The public house is a potent factor in the propagation of the disease.

With decline in the drink consumed, the people are better housed, live better, and tuberculosis is lessened.

CANCER AND IRRITATION.

Dr. Bashford of the Imperial Cancer Research work gives the following general statements as part of the conclusions arrived at:

1. The use of very hot rice in China.
2. The use of the Kangri fire box in Kashmir.
3. The chewing of betel nut in the East.
4. The use of the short clay pipe, which becomes hot and sticks to the lip.
5. Alcoholic excesses act as an irritant, and are causes of the disease.
6. Strong spices, such as curries, etc., have found to act as excitant of cancer.
7. Those who work among soot, such as the chimney sweep, or the maid who cleans the fire-place. This is due to the aniline matter in the soot. Coal dust will not cause any harm.
8. Workers in places where aniline colors are produced are liable to suffer.
9. Those who use x-ray machines are specially liable to the disease.

 THE BIRTH RATE.

In France the birth rate is now about on a par with the death rate. In other words, that country is increasing in population very slowly.

The increase in Germany is much more rapid, but even there is beginning to show the effects of the strenuous life and the greater cost of living, as a factor in preventing marriages and keeping down the number of children.

The conditions in Britain are quite special. For a considerable number of years the owners of land have made it more and more difficult to live in the country. Young men and women either go abroad, or go to the cities. This tends to reduce wages and lessen the amount of work for each. They either remain single or live as far as possible childless lives. During the past ten years, Britain increased at the rate of 9 per cent. The previous 10 years at the rate of 12 per cent.

In rheumatism and rheumatic affections acetosal is a favorite prescription. 5 to 15 gr. every four hours will check the pain and fever in a most satisfactory manner, the temperature in almost every case becoming normal within a few days. The dose should be repeated thrice daily for a week, then 5 or 10 grains per day for the following three weeks.

ORIGINAL CONTRIBUTIONS.

PREVENTION OF BLINDNESS.*

By THOMAS A. WOODRUFF, M.D.,
Chairman Chicago Association for the Prevention of Blindness, Chicago.

IT has been said by some one that "preventatives of evil are far better than remedies; cheaper and easier of application and surer in result." Efforts which have been more or less successful have been put forth to prevent crime, immorality, accidents, pain, etc., but until a comparatively recent date very little has been done to guard against that most deplorable and dreaded of all infirmities, blindness, the number of whose victims has continued to increase from year to year.

Of the blind people of the world it can be safely said that over 40 per cent. are unnecessarily deprived of their sight as a result of ignorance, neglect, and carelessness. Such an assertion is borne out by facts, and this in an age whose watchword is "prevention."

Preventable blindness is due to numerous and varied causes, among them being industrial accidents, accidents at play, sequelæ of some of the infectious diseases, wood alcohol, sympathetic inflammation, syphilis, hereditary and acquired; progressive near-sightedness, eye strain of various kinds, particularly among school children, and ophthalmia neonatorum.

It is incumbent upon those who desire to ameliorate the conditions of a struggling humanity to investigate and eliminate any administrative fault, any kind of neglect, any form of abuse, which may justly be cited as the cause for a single case of unnecessary blindness. Surely any cause which results in such deprivation to a single human being merits the most careful investigation, with a view to such complete elimination that no person will be deprived of the light and find himself in a world of unnecessary darkness.

INDUSTRIAL ACCIDENTS.

Blindness resulting from industrial accidents is, unfortunately, met with in large manufacturing centres, and is many times considered an act of God, which must necessarily be accepted without complaint or criticism.

That these accidents are largely unnecessary and could easily be prevented has been so impressed upon many of the large casualty insurance companies that one of them has issued a book for general distribution, showing the most common cause of accidents and how they might most effectually be avoided. That accidents will occur no one will

* Read at the meeting of the Ontario Medical Association, 30th and 31st May and 1st June, 1911.

deny, but many that do occur are wholly unwarranted, and could have been prevented if only ordinary precaution had been taken. This is not alone the fault of the employer in not surrounding his workmen with the necessary safeguards for their protection, but in many instances must be laid at the door of the employee himself, whose carelessness often exposes him to the dangers that may render him a helpless being for the remainder of his life. From statistics collected in Germany, to which country we are indebted for much exact information regarding the causes of accidents, it appears that 60 per cent. of the accidents are due to the negligence of employers or employees, and that 40 per cent. are due to the inevitable risk of employment. This goes to show that more than one-half of the accidents are not only preventable, but are due to lack of skill and carelessness, absence of these safeguards on or about the machinery or tools that should be used for the protection of the workman, acting against rules on the part of the workman, and other evidence of neglect which might and should be avoided.

About 15 per cent. of the injuries met with are those affecting the eyes. It has been found that these accidents usually occur at a time of life when a man's labors are most productive—that is, between 20 and 40. His earning power during this period is at his best. Many of the injuries occur from flying bits from emery wheels, from chips of steel, etc. Another common cause of injury is from what is called a mushrooming hammer, in which the hammering surface is driven beyond the outer edge, so that the bits are easily broken off and fly into the eye.

The United States Steel Corporation has devoted much time and money in order to safeguard their employees against accidents. They have a corps of trained specialists who devote their time to studying the causes of accidents and devising means to prevent them. They have what is known as a central committee of safety, who hold frequent meetings, and to whom drawings, photographs, rules, specifications, etc., are submitted for consideration, and such as seem desirable are sent out to all the companies which go to make up this large corporation, in which there are approximately 200,000 employees. During the two years since the institution of this central committee of safety its inspectors have reported to it, in round numbers, six thousand recommendations for increasing the safety of employees, in the plants, mills, mines, and on the railroads and steamship lines of the organization. Of these 93 per cent. have been adopted by the committee and carried out by the subsidiary companies.

Since the adoption of these measures accidents occurring in various plants of the United States Steel Corporation have been reduced about 50 per cent.

Instructions are given to workmen in every shop as to the use of the various appliances, and notices are posted where they can readily be seen, such as, "Never run a wheel above its indicated speed." A workman on an emery wheel should keep his eyes and body out of the plane of rotation of the wheel. A grinder is advised to wear large, protective glasses, made of plane glass, or some form of protector for his eyes. Appliances and guards are placed over wheels and other portions of machinery, and wire screens, protective glasses, and other safeguards are supplied to the workmen for their protection.

Even with all this many accidents do occur, and many an eye is lost through ignorance and neglect. Laws should be on our statute books not only compelling the employer to furnish adequate protection, but likewise compelling the employee to take advantage of the means provided for the conservation of his vision.

WOOD ALCOHOL.

That the use of wood alcohol is responsible for the loss of eyesight, and even the loss of life, is a fact more or less widely known. Since, in 1904, the *Journal of the American Medical Association* published papers by the late Frank Buller and Casey A. Wood, that knowledge and the fact that a perfectly harmless cheap substitute has been introduced in the form of commercial denatured alcohol, which can be obtained of any druggist, and would render the use of the deadly wood alcohol practically nil.

The ignorance of the general public of the dangers of the use of wood alcohol can easily be understood, but that manufacturers and men employing large numbers of laborers in the arts and sciences should still persist in using the deadly drug when the commercialized alcohol is equally as cheap and easy to obtain is beyond comprehension.

That reasons for using wood alcohol as a cheap substitute for grain alcohol are still pressed upon the large consumer and the small consumer, the manufacturer and the housewife; that it is still largely used for cleaning and fuel, still enters into the making of varnishes, into essences, flavoring extracts and perfumes; that it still exists in the face of its deadly qualities, should be a reason for extreme measures being taken by men in and out of the medical profession.

It should be the business of every medical practitioner, every medical journal, as well as the daily press, to give widespread publicity of the existence of the denatured, harmless grain alcohol now on the market, as cheap as the other substitute which has been accountable for numberless deaths and countless cases of blindness.

While on the subject I would like to suggest that every member of this association should use his influence to have a bill introduced into the

House of Commons to provide for some form of denatured alcohol, or, as in Great Britain, methylated spirits, which would be as cheap as the objectionable wood alcohol, and whose use in the arts and sciences is not attended by the dangers following the employment of deodorized or other forms of wood alcohol.

TRACHOMA.

Of the several infectious diseases of the conjunctiva trachoma is undoubtedly the most serious, not only on account of its being very contagious, but of the serious complications that may arise during the course of the disease, in consequence of which vision may become materially affected and may, if neglected, even lead to complete blindness.

Trachoma is undoubtedly on the increase in the United States, and I have no doubt the same statement will be found to be true in Canada. This is due to the extensive immigration, particularly of those people who come from parts of Europe where the disease is more or less prevalent; and, although every precaution is exercised at our ports of entry to exclude this disease, cases mildly infected presenting very few external symptoms are easily overlooked. The very absence of such signs and symptoms removes the ordinary danger signal that forms the best safeguard for those brought into intimate relations with individuals infected with trachoma.

Of all pupils attending two of the large public schools in New York City 20 per cent. were found to be suffering from contagious eye diseases. Of these 25 per cent. were infected with trachoma of such a serious nature that a cure of the conditions could only be reasonably hoped for after operative measures had been resorted to.

Canada is now being populated by foreign people, many of whom come from countries in which trachoma is more or less prevalent, and no effort should be spared to prevent the spread of a disease which, if not checked in its early stages, leads, if not to total blindness, to such deterioration of vision that the individual is unfitted for work, and as an economic asset is a loss to the state and apt to become a charge on the community.

Trachoma is preventable. It most frequently occurs among those who live in badly-ventilated rooms, and is closely associated with poverty and unsanitary conditions about the homes. The disease is not confined to the cities, but those who live in the country districts are especially liable to suffer from its ravages. It is very prevalent in the mountain districts of Kentucky, in Arkansas, and in the southern part of the State of Illinois.

Nearly twice as many of the blind in our asylums come from the country as from the city. Individuals affected with the disease must be

kept out, and neither political influence nor official neglect should allow the entry into this country of a class of emigrants afflicted with the disease.

Although a more or less rigid examination of the eyes for the detection of trachoma is made of emigrants who occupy the so-called steerage accommodations on the various lines of steamships, what about those who are fortunate enough to occupy first or second-class accommodations? No examinations are made of these individuals, nor precautions taken to exclude them.

That trachoma in some form or other exists and is met with amongst the children attending the public schools in our large cities makes it necessary that inspection and stringent regulations should be required in order to secure its eradication. Such hygienic regulations should be enforced as to prevent risk of further spread of the disease, and such laws should be enacted making it compulsory to report to the proper authorities all cases of trachoma, that they may be surrounded with such restrictions that further spread of the disease is impossible.

Steps have been taken toward suppressing one cause of blindness, namely, ophthalmia neonatorum, which for years resulted in more blindness, with the exception of optic nerve atrophy, than any other local affection. The micrococcus of gonorrhœa is responsible for approximately two-thirds of all the cases of ophthalmia neonatorum, the micro-organisms being readily found in the discharges resulting from the infection, especially in the more severe and complicated forms. Various micro-organisms, such as pneumococcus, Koch-Weeks bacillus, Morax Axenfeld diplobacillus, streptococcus, etc., are responsible for the other third. These cases represent the milder and less dangerous to sight types of the inflammation. The necessity of an early and exact diagnosis is important. This necessitates a bacterioscopic examination of the secretion from the inflamed conjunctiva. Unless the conjunctival inflammation be due to the gonococci the cornea is rarely affected. Although it is true that almost all severe cases of ophthalmia neonatorum are due to the gonococcus, it does not necessarily follow that every case in which gonococci are found will be a severe form of the disease. Even in the mildest forms complications may develop at almost any moment. On the contrary, what sometimes appears from all clinical appearances to be gonorrhœal ophthalmia sometimes turns out, on bacteriological examination, to be due to some other micro-organism. The type of inflammation is milder, and generally responds quickly and readily to treatment. Complications are seldom present, and the cornea is rarely affected. The baby's eyes may become infected—

1. Before the act of birth, while in the uterus.
2. During the act of birth.

3. Almost immediately after birth.
4. One or several days after birth.

In most cases infection takes place immediately after birth. The morbid secretion collected around the eyelids during the act of birth is carried into the conjunctival sac after the child is born, by the winking of the eyelids, by the fingers of the infant or attendants, or by towels and other materials used to wash the child. This is the period at which great care should be exercised and every precaution taken to guard against infection. A baby normally passes through the vagina with eyelids closed, sealed with the vernix caseosa, so that it is scarcely possible for any secretion, morbid or otherwise, to penetrate between the lids and cause infection. Such infection, however, might occur during face presentations, the applications of forceps, or during digital explorations on the part of the physician.

Symptoms.—The first signs of infection usually make their appearance in one to three days. One eye is usually affected first, the other soon following. One of the earliest signs of infection is that of Billard, which is a narrow, transverse red line appearing in the centre of the upper lid. This is soon followed by a slight swelling of and redness along the edges of the lids and the appearance of thin mucopurulent discharge exuding from between the lids. The lids quickly become red, hot, swollen, and tense, the upper lid often overhanging the lower. Owing to the secretion which becomes thick and yellow with frequently a greenish tinge, the lids are with difficulty separated and everted. Many times a thin greyish membrane forms on their under surface. The everted lid shows the conjunctiva to be thickened and vascular. The ocular conjunctiva is red and chemotic, but not so swollen as to overlap the cornea, as in the gonorrhœal ophthalmia of adults. If the case is not given immediate attention the cornea may become opaque and ulcers develop, eventually ending in corneal perforation. Exceeding care should be exercised in separating the lids so that the eyeball may not be subjected to a pressure which increases the danger of perforation of the cornea. When this occurs the iris prolapses and an anterior staphyloma begins, resulting in the loss of sight. In still fewer cases the sight is quickly destroyed from septic inflammation of its interior.

Treatment.—After the disease has manifest itself the treatment consists in the vigilant practice of cleanliness, the destruction of the noxious germ, and the subduing of the inflammation. The inflamed eyes should be kept free from pus by frequent and gentle irrigation with warm antiseptic solution. This treatment given every half-hour is not too frequent. It is necessary to exercise gentleness in these treatments, for force might injure the cornea. Hot applications should be applied at

least every hour. The destruction of the micro-organism is best accomplished by means of nitrate of silver solution, to be applied to the everted lids in a 2 per cent. solution at least once daily, and the excess washed off with either saline solution or plain water.

Nitrate of silver is more valuable than any of the new preparations of the silver salts, such as protargol, argyrol, etc. It is well, however, to use these to supplement the nitrate of silver. If the cornea becomes infected atropin should be instilled in $\frac{1}{2}$ to 1 per cent. solution, and any ulcers present may be cauterized. All cloths, etc., used for bathing the lid should be burned immediately after use. All persons brought in contact with the infant should be warned of the danger from possible infection.

Prevention.—It is generally recognized throughout the world that infection of the eyes of new-born children by a purulent inflammation caused by one of several muco-organisms is one of the chief causes of blindness. Previous to 1881 the children born had their eyes so frequently infected with a purulent inflammation, which was disastrous to sight in such a large percentage of cases that investigators had been endeavoring from time immemorial to find some remedy that would prevent infection. Literature abounds with remedies innumerable. In the early part of the last century efforts were made to find some method of preventing the disease by first removing the disease in the mother during pregnancy, and, if this was not successful, to get rid of as much discharge as possible from the vagina during the birth of the child, and to thoroughly cleanse the eyes of the child immediately after delivery with a solution capable of destroying the action of the discharge. This was more or less the line of procedure followed by the majority of men, a variety of prophylactic measures being recommended, among them being chlorine water, salicylic acid, thymol, potassium permanganate, benzoic acid, tannin, iodoform, carbolic, and various other remedies too numerous to mention, each having its advocate as a means of preventing infection. All observers were united on one point—that whatever procedures were adopted they should be used the instant the head was born, and before the baby had time to open his eyes. Nothing seemed to avail until, in the year 1881, Prof. Carl Credé, of Leipsic, after many a careful and scientific investigation, gave to the world a prophylactic, the use of which has been the means of diminishing the number of infections in the eyes of newborn babes, and saving thousands of them from passing their days in darkness. His treatment consisted of a single drop of a 2 per cent. solution of silver nitrate, simply dropped into the baby's eyes as soon as convenient after birth.

The details of the method which Credé used are important and also interesting. After various experiments with different antiseptics the eyes

of all new-born children in the clinic were cleaned immediately after birth with ordinary water and then disinfected by means of the silver nitrate solution. After the assistant had gently separated the eyelids, a single drop of the solution was placed in the eye by means of a glass rod. For 24 hours after the application the eyes were cooled by means of a linen fold soaked in a 2 per cent. solution of salicylic acid, laid over them. Babies undergoing such treatment were saved from ophthalmia, notwithstanding the fact that many of the mothers were evidently suffering from blenorrhœa. Not infrequently the eyes became somewhat congested, accompanied occasionally by a slight discharge after the use of the silver drops, but this subsided with appropriate treatment and was never serious.

That Credé's plan was successful is evident, as the percentage of cases of ophthalmia in the Leipsig clinic declined from an average of $10\frac{3}{4}$ per cent. in the seven years to $\frac{1}{2}$ of 1 per cent. in 1880. A still more convincing testimony to the success of Credé's procedure is the overwhelming fact that during the three years following this discovery there was only one case of ophthalmia among 1,160 children born alive. Throughout all parts of the civilized world medical men have made similar reports of equally effective results. Striking testimonies to the success of Credé's plan are given conspicuous place in medical literature. It has been shown by Köstlin that, previous to the adoption of the nitrate of silver treatment the number of cases of ophthalmia in the practice of 32 observers ranged from 2.25 per cent. to 59 per cent., and averaged 9.24 per cent. After the adoption of the Credé treatment among 24,724 babies ophthalmia varied from zero to 1.93 per cent., an average of 0.655 per cent.

There has been much objection to the use of nitrate of silver on account of the exceptional cases of hyperemia of the conjunctiva following its use, but this has never been severe if the procedure as recommended by Credé has been carried out according to his directions. The solution should be neutral, or only slightly acid, in reaction, and not more than one drop of this solution should be instilled into the conjunctival sac, and should not be repeated. This is preferably done by means of a glass rod. If the infection has already taken place, a single instillation of the nitrate of silver would not abate the disease. Experiments have been made with various antiseptics, especially with the newer silver salts, which are undoubtedly less irritating to the conjunctiva, but it has been found that, although in some cases the use of solutions of argyrol and protargol have shown a certain amount of efficiency as a preventive of ophthalmia neonatorum, they have not as yet been given sufficient trial to be preferred to nitrate of silver. From the statistics collected by Sydney Stephenson it goes to prove that weaker solutions than 2 per

cent. are efficacious. The 1 per cent. solution is fully protective, and is to be regarded as absolutely prophylactic.

Even with this means at our disposal numerous cases occur in which the use of this prophylactic has not been used, and the results of the neglect are only brought to our notice when statistics are sought as to the cause of blindness. In America it is exceedingly difficult to ascertain how general is the ophthalmia of new-born children and what results follow it. It is impossible to state definitely the exact percentage of blindness due to this cause. In the United States there are more than 10,000 persons blind from ophthalmia neonatorum, who, if ordinary precautions had been taken at the time of birth, would to-day have their sight and be useful members of society. Statistics are sadly deficient, but it is nevertheless a fact that there are many cases of infantile blindness at the result of ignorance and neglect at the time of the birth of the child.

From the most recent report of the Committee on Ophthalmia Neonatorum of the American Medical Association, based on statistics taken from the records of ten schools for the blind in eight states of this country and from the Province of Ontario has shown that 28.69 per cent., or over one-quarter of the whole number, admitted to these schools were blind from a cause that was preventable. The report of the Pennsylvania School for the Blind, covering a period from 1900-1907, inclusive—eight years in all—33.36 per cent. of the pupils admitted had lost their eyesight as a result of ophthalmia neonatorum. From such reports from states where every facility is given to attain the highest standard in sanitation and guard against unnecessary disease, it is logical to reason that at least the same proportion of blindness from this cause exists in other communities where like precautions are not strictly adhered to. This can only be determined when exact statistics can be obtained. Ophthalmia neonatorum is preventable, but, owing to the lack of proper laws, it is difficult to determine the frequency of its occurrence, the conditions under which it exists, and the best methods by which results may be obtained in protecting the eyes of the new-born child.

Ophthalmia neonatorum is forcibly called to our attention, not because of its frequent occurrence, but because of the disastrous results that it produces—total, or partial, blindness. Although it is no respecter of persons, it is much more frequent among the very poor and neglected than among those in the higher and more favored walks of life.

That ophthalmia neonatorum is a preventable disease has been conclusively proved, if proper care is exercised at the birth of the child, and it can be cured if effective treatment is begun immediately on the development of the disease. On the other hand, ophthalmia neonatorum is fatal

to sight unless prophylactic and curative measures are promptly taken, and finally results in total blindness through the destruction of the eye-balls.

The public must be educated not only to the existence of such a disease and the terrible consequences that may result from its presence, but to the fact that it is preventable. They must also be made to realize that their aid is necessary in securing such legislation as will make compulsory the use of such measures as will prevent this disease, if we wish to protect the children of the coming generations from total blindness. The movement to stamp out this disease resembles very much the fight that is being carried on against tuberculosis. The medical profession requires the backing and support of the laity, who, working together, will be able to wake up the interest of the general public as to what is required to protect the infants of the future against blindness. Education in the movement may be carried on by means of a wide distribution of literature, leaflets, and various forms of propaganda, photographic exhibits, lantern slides, press notices, magazine articles, and public speaking before all kinds and grades of audiences.

The statute books of many states contain laws relating to the prevention of ophthalmia neonatorum, but, unfortunately, these laws have become more or less of a dead letter, and an effort should be made requiring their enforcement. If this were done, and a few prosecutions obtained for failure to adhere to the law, much benefit would be reaped in the fight for the prevention of blindness from ophthalmia of the newborn.

Laws should be passed which would require state control of the blind. All cases of inflammation of the eyes of new-born babies should be reported by physicians and midwives. Provision should be made for the care of all such cases in hospitals and appropriations should be forthcoming in order to provide for the education, registration and regulation of midwives. Births should be reported early, and the question asked in each certificate, "What preventative for ophthalmia neonatorum did you use? If none, state the reason therefor."

The cost for maintenance and education for each child in the New York State School for the Blind, at Batavia, is \$407.43 per year, while it costs the state but \$30 per year for each child attending the public schools of Buffalo, an excess of \$377.43 to be provided by the state for each blind child—and one-third of the children at the New York State School for the Blind are victims of ophthalmia neonatorum.

THE COST FOR ONE YEAR OF NEEDLESS BLINDNESS IN NEW YORK.

Cost for education and maintenance of those blind from ophthalmia neonatorum at Batavia School for the Blind in one year	\$14,260 05
Education alone in school for the seeing (public schools) would have cost	1,050 00
Excess cost paid by the state at Batavia	\$13,210 05
Cost for education and maintenance of those blind from ophthalmia neonatorum at New York Institute for the Blind in one year	18,904 40
Education alone in school for the seeing would have cost	1,200 00
Excess cost paid by state in New York City.....	17,704 40
Total excess in one year for unnecessary blindness	\$30,914 45

THE COST OF NEEDLESS BLINDNESS IN OHIO.

Victims of ophthalmia neonatorum in state school	64
Per capita cost in state school (average) (maintenance and expense)	\$ 340 00
Per capita cost seeing schools (average) (maintenance private expense)	30 00
Per capital excess for needlessly blind	310 00
Total annual excess cost for maintenance and education of those whose sight might have been saved	\$19,840 00

This total of more than \$50,000 expended annually in two states for the support of ophthalmia neonatorum victims does not include appropriations made by the state to private institutions, nor the cost of maintaining and educating the blind children at private expense. Nor does it take into account the incalculable loss to the state, in many instances, of one of its most valuable assets—a productive citizen. Argument seems unnecessary when we contrast with these figures the estimated loss to the State of New York of \$5,000 annually for a free distribution of a prophylactic against ophthalmia neonatorum, while the estimate to meet the need in Massachusetts is \$2,500.

In a recent report of the Illinois School for the Blind, at Jacksonville, 17 per cent. of the inmates were blind as the result of ophthalmia neonatorum. Sixteen of the thirty-two children in the kindergarten had lost their sight from this disease.

From these figures, is it asking too much of this state that proper legislation be enacted making it compulsory to use such preventive

measures that will protect its citizens from the untold misery of blindness? Helen Keller says, regarding the prevention of blindness:

"Once I believed that blindness, deafness, tuberculosis, and other causes of suffering were necessary, unpreventable. I believed that we must accept blind eyes, deaf ears, diseased lungs as we accept the havoc of tornadoes and deluges, and that we must bear them with as much fortitude as we could gather from religion and philosophy. But gradually my reading extended, and I found that those evils are to be laid not at the door of Providence, but at the door of mankind. The problem of prevention should be dealt with frankly. Physicians should take pains to disseminate knowledge needful for a clear understanding of the cause of blindness. The time for hinting at unpleasant truths is past. Let us insist that the States put into practice every known and approved method of prevention, and that physicians and teachers open wide the doors of knowledge for the people to enter in. The facts are often revolting, but it is better that our sensibilities should be shocked than that we should be ignorant on subjects upon which rest sight, hearing, intelligence, morals, and the life of the children of men. Let us do our best to rend the thick curtain with which society is hiding its eyes from unpleasant but needful truths."

7 West Madison Street, Chicago.

DISCUSSION.

DR. MACMURCHY emphasized the importance of dealing with the question of the registration and training of midwives, and remarked on the necessity for the early notification and registration of births, both for the prevention of blindness and the prevention of infant mortality.

DR. RYERSON raised the question of the value to an individual of the loss of an eye. He stated that the loss of one eye was equal to 21 per cent. of his earning power. In case of loss of both eyes actuarial estimates would furnish a basis of settlement of claim in industrial suits.

T. A. WOODRUFF, in reply, said that laws should be passed compelling early notification of births. If any irritation of the conjunctiva is present, the proper authorities should be notified within twelve hours after birth of child, so proper measures can be taken to arrest the inflammation.

EQUINE DEATHS FROM HEAT.

The recent period of extreme heat, in which the record of deaths from this cause was almost unprecedented, was even more fatal to horses than to men, and in the Boroughs of Manhattan and the Bronx alone no less than six hundred of these animals died from the heat.

THE PATHOLOGY OF APPENDICITIS.*

By N. T. MACLAURIN, M.D., Toronto.

MR. President, Ladies and Gentlemen,—In this paper I have endeavoured to give an account of some of the recent investigations in the aetiology and pathology of appendicitis, and chiefly those of Aschoff, who in 1908, published the results of seven years' work in the careful study of 1,000 cases of appendicitis. These researches were carried on with the greatest possible care, and the material handled in such a manner as to preclude, if possible, the production of histological facts. The illustrations, which are with three exceptions, reproductions from Aschoff's plates, will be shown in evidence of the histological character as we come to them.

Statistics show that appendicitis is chiefly met with from the tenth to the fortieth year. Lockwood's youngest case operated upon was $3\frac{1}{2}$ years, and the oldest, $83\frac{1}{2}$. Kelly and Hurdon record the instance of a new born negro child with an inflamed appendix in an umbilical sack. Stengel (1908) states that the majority of cases occur from the 11th to the 30th year, and that after 40 years there is a rapid diminution of frequency. Aschoff has seen a fatal case in a four months' old child. Sir Frederick Treeves gives the following estimate taken from Hawkins & Fitz 452 cases:

5 to 10 years	.....	10.8 per cent.
10 to 20 "	.....	40.7 per cent.
20 to 30 "	.....	29 per cent.
30 to 40 "	.....	11.5 per cent.
40 to 60 "	.....	4.6 per cent.
Over 60 "	.....	3.4 per cent.

Most writers agree that more males than females in nearly the proportion of two to one suffer from appendicitis. Stengel gives the frequency as two or three times greater in males, and suggests that the increased blood supply through the appendiculo-ovarian ligament may play a part. Krönig's cases came in almost equal proportions from both sexes, and Aschoff agrees with this.

Heredity is probably of no special consequence, though the influence of possible developmental peculiarities should be borne in mind.

Occupation is thought by some to play no part in the causation of appendicitis, though Lockwood states his belief that fatigue and irregular meals incident upon certain callings may have an influence. Exposure to cold, causing internal congestion and chronic dyspepsia as contributory causes may favor the onset of an attack. Dr. Hawkins states that

* Read at the meeting of the Ontario Medical Association, May 31 and June 1, 1911.

appendicitis is commoner in summer than winter, and Sir Frederick Treeves that it is commoner in tropical than in temperate climes.

Attacks are said to have followed blows over the caecum, and also after strains or sometimes violent purgation. These, however, may only serve to increase the inflammation in an already affected appendix.

The part that foreign bodies within the lumen of the appendix play in the production of appendicitis, is not nearly so great as was at one time thought to be the case. Those found in inflamed appendices include pins, small nails, portions of bone, fruit pips (occasionally) sand granules, and parasites (trichocephali), oxyuris, ascaris lumbricoides, and other intestinal entozoa more rarely. From the following table is seen how rarely Aschoff has found foreign bodies present:

A. bristle	1 case.
A thick hair	1 "
Berry seeds	3 "
Oxyuris	2 "
Trichocephali	2 "
Small piece of lead	1 "
Sand granules	1 "

These were found in:

- (a) Inflamed appendices, 5 cases (In 2 trichocephali, in 1 a seed, in 1 a hair, in 1 a bristle.
- (b) Healed inflammation, 1 case (oxyuris).
- (c) Normal or with no demonstrable inflammation, 5 cases (in 2, berry seeds, 1 oxyuris, 1 sand granules, 1 piece of lead.)

The anatomical and physiological variations in appendices, and their effect in producing stagnation of the contents, and consequent multiplication and increase in the virulence of the bacteria, is a much more important question. In Aschoff's table of 168 diseased and normal appendices, the variations are given as follows:

1. Slightly comma-shaped and C-shaped.	54	of which	9	were	normal.
2. Fish hook to U-shaped	43	"	9	"	"
3. S-shaped	28	"	3	"	"
4. Angular bending	20	"	2	"	"
5. Straightly extended	17	"	0	"	"
6. Spiral rotation	6	"	0	"	"

The kinks and bends play a most important part in determining the localization of the inflammation, not only at its commencement, but seem often to have an influence after infection has occurred, in either limiting the process to the portion of the mucosa distal to the obstruction behind

which the infection began, or, on the other hand, in some cases, favoring the more widely involvement of the mucus membrane.

The *presence of faeces* within the lumen of the appendix cannot be regarded per se as a menace to the organ, and indeed may favor the protection of the crypts and lacunae from bacterial invasion.

In Aschoff's tables, in 52 normal appendices, faeces were found in 32 cases, 62 per cent.; faecal calculi "v" 3 cases, 6 per cent. In 177 slightly inflamed appendices, faeces were found in 110 cases, 62 per cent.; Faecal calculi found in 22 cases, 10 per cent. In 126 extensively diseased appendices, faeces were found in 12 cases, 10 per cent.; faecal calculi found in 34 cases, 27 per cent.

Faecal calculi are formed within the appendix itself, and by mechanical occlusion of the lumen, favor stagnation of the contents, with multiplication of the bacteria and probably increase their virulence. They are formed of fecal material containing mineral salts (the phosphate and carbonate of lime, and magnesia), and mucus, desquamated cells from the mucosa, and largely (one-third) of micro-organisms.

Deaver found concretions in 16 per cent. of his cases. Treves found concretions in 30 per cent. of his cases. Ribbert found concretions in 9.5 per cent. of his cases (400 cases).

There may be several present, but usually they are single. Faecal calculi are thought by some to erode and mechanically injure the mucus membrane, and Holländer states that in serial sections they may be observed to have gradually entered into the mucosa. Sprengel, Von Brünn and Aschoff are opposed to the idea of their mechanical influence in this way. Sprengel, Van Brünn and others recognize a special danger, and the possible source of the attack from the enormous bacterial content of the calculus, but Aschoff, on the other hand, is convinced that the calculus itself is harmless. Watzold is of the opinion that its formation takes place in inflammation of the appendix due to changes in the muscular wall influencing the entrance of faeces and the secretion of mucus. To Aschoff it appears certain that the calculus is the result, and not the cause, of inflammatory changes, and that it only serves to localize the inflammation and influence its further course. With a large concretion, the wall at the apex of the calculus becomes tense and vascular changes predispose to total necrosis of this portion of the wall, and the passage of the concretion through the necrotic area is favored by the presence of the accumulated material within the lumen of the appendix. Nordmann also believes that faecal calculi are predisposing causes when they have become large enough to occlude the lumen of the appendix, and when in association with bacterial infection. He is also of the opinion that in a destructive lesion, the calculus may act as a protection against perfora-

tion as under internal pressure and the influence of peristalsis, it is pressed against the aperture.

The bacteriological studies of acute inflammation have not shown that appendicitis is set up in the first instance by one specific organism, though all bacteriologists have demonstrated the presence of streptococci. From Cohn's investigations it is seen that the earlier a case comes to operation the more do streptococci predominate in the appendix, and Aschoff concludes that a diplococcus of the streptococci group in association with a delicate curved rod is probably the true causal agent.

Heile (Wiesbaen, 1909) in 50 cases of acute appendicitis examined by him, 30 of which resulted in severe peritoneal suppuration, found in the peritoneal exudate:

In 90 per cent. of the cases, *B. Coli Communis*; in 60 per cent. of the cases, Streptococci; in 10 per cent. of the cases, Diplococci; in 3 per cent. of the cases, Staphylococci, Pseudo-diphtheria bacilli, *B. Pyocyaneus*.

In about 30 per cent. of his cases he discovered a rod which had never been described before. Morphologically it appears to be midway between the proteus and hay bacillus (*B. Subtilis*) and grows both aerobically and anaerobically. It contained spores in only two cases (both of great severity and associated with icterus and coma; one of which was fatal). These bacteria were absent from the blood, which, however, agglutinated the spore carrying forms in a marked degree. *B. Coli* and Diplococci (both found in the pus) did not give the agglutination reaction. Ingested by leucocytes, they caused vacuolation and signs of degeneration after three minutes. Rabbits inoculated died of toxæmia, not of septicæmia. He concludes that this is probably not alone responsible for the inflammation, but attributes the general picture of toxæmia to this rod. In two other cases of moderate severity he recovered pure streptococci (intra-cellular) from the wound. In the advanced cases of appendicitis, *B. Coli* is usually found, and is often associated with other forms, though occasionally in pure culture, and has then probably outgrown the causal bacterium. Aschoff does not believe that *B. Coli* is capable of initiating an attack, but later on, mixed infections are particularly liable to occur.

B. Lactis Aerogenes; *B. Capsulatus Aerogenes*; *B. Pyocyaneus*; *B. Influenza*; *B. Friedlander*.

The question of the hæmatogenous origin of appendicitis has been dealt with by Kretz, who traces the condition to blood infection from one of the tonsils. He observed in many cases capillary emboli of cocci in the centre of the lymph follicles with hemorrhage into them, but in these cases there were no other signs of acute inflammation. Aschoff has not been able to demonstrate these cocci emboli and doubts their occurrence except one is dealing with septic pyæmia. He is convinced

that very few investigators have had the opportunity of examining a normal appendix, and believes the hemorrhages in inflamed appendices are only partly due to inflammation and chiefly to trauma due to the operation. And this is borne out by facts, that in spite of the presence of bacteria there is no tissue reaction. The consensus of opinion of the surgeon who took part in the Berlin discussion on this question was the improbability of haematogenous infection, and in any case its great rarity.

Tedesco has pointed out, from the experimental inoculations of Adrian in eight cases, that septic emboli in the lymph follicles of the caecum were only found in two cases. The streptococcal infection having been produced by injection subcutaneously, intravenously and into the pharynx. Beyond necrosis of the lymph follicles and hemorrhages no inflammatory changes in the appendix were reported.

Hansemann advocated extension of the inflammation from the caecum, but Aschoff has pointed out that histological examinations have not shown this to be the case, and he has repeatedly found with the most severe disease of the distal portion, the mucus membrane of the proximal portion of the appendix may show no trace of inflammation.

Von Hansemann believes that Gerlach's valve plays an important part in favoring the introduction and retention of faeces and promoting stagnation. But the inflammation does not usually start behind Gerlach's valve and Aschoff's statistics indicate that the mere presence of faeces is unimportant, having found them present in 62 per cent. of fifty normal cases examined. Hansemann admits that the presence of faeces is not evidence of the impermeability of the valves.

Aschoff concludes that the conditions which determine the increase in the virulence of the bacteria and favor their inoculation at definite points are:

1st. Stagnation of the contents of the lumen, chiefly brought about by physiological kinks and also by stenosis, faecal concretions and rarely other foreign bodies and very rarely tumors.

2nd. Hypertrophy of the lymphatics, acting in a merely mechanical way to produce deepening of the grooves.

3rd. Retention of mucous, giving lodgment to the infective agent.

The following statistics would show that appendicitis is much more prevalent than might have been supposed. Ribbert found obliteration and stenosis in 25 per cent. of his cases between 30 and 40 years of age.

In 150 appendices removed in abdominal operations on women, Pankow (in 1908) reported as follows:

1. Definite signs of healed appendices, 84 cases, 56 per cent.; 2. Definite extension of external inflammation to appendix, 5 cases 3.3 per

per cent.; 3. Uncertain histological findings, 24 cases, 16 per cent.; 4. Normal appendix 37 cases, 24.66 per cent.

Kröng found in 28 cases operated upon for genital disease, without any clinical signs of appendicitis.

Normal appendix	5 cases.
Advanced disease	7 "
Uncertain	2 "

Signs of previous appendicitis, 14 cases, 50 per cent. Those showing advanced disease, and those with signs of previous inflammation taken together give 75 per cent.

Aschoff's results indicate a probability that at least 25 per cent. of cases of appendicitis heal without stenosis and obliteration, and concludes that of all adults half only attain the fourth decade with a normal appendix.

From Pankow's statistics the proportion of one in two is definitely established. And Aschoff argues that if the uncertain cases were added to these, the proportion rises above 70 per cent., and again, if for the fifth decade 1-10th more cases are added, the proportion rises above 80 per cent.

Passing to the histology of the appendix it is seen that in the new born child all the layers are comparatively thin with slight development of the mucosa, and sub-mucosa, and also a small amount of lymphatic tissue. The epithelium is rich in goblet cells, which cover the short Lieberkuhn's crypts. It is worthy of note that Kelly remarks on the irregular arrangement of the longitudinal musculature, and Mundt also has only been able to find slight variations in thickness. This is important in view of the fact that in later life cicatrization of the muscle wall is common. "There is a steady development of lymphatic tissue and filling of the lymphatic tracts and submucosa with leucocytes." These changes are concluded to be merely developmental, and it is found that acute appendicitis shows quite different and more severe changes, and usually runs more acute and rapid course than is the case in adults.

In adults the folds of mucous membrane have become more distinct, due to the physiological contraction of the muscularis. The lumen is now star-shaped at the proximal part, X or Y-shaped in the middle portion, and that of a fissure at the distal end.

Von Brunn agrees with Aschoff that the obliteration cicatrices are the residual process of acute intra-mural abscess, and as these obliterated appendices show signs of former acute inflammation the view of physiological atrophy with obliteration is not maintained.

Riedell and Oberndorfer have found stenosis and obliteration due to lymphatic nodular proliferation. Ribbert also believes obliteration to be due to an inflammation of slow course.

Aschoff on the contrary does not find histological proofs of this as in his acute cases the obliteration is situated where the most acute destructive inflammation occurred, and Stengel also is of the opinion that it is more correct to regard these changes as the result of acute appendicitis.

In conclusion, Ribbert's statistics, amplified by the results of the researches of Aschoff, indicate that three-fourths, or possibly four-fifths of all people suffer from appendicitis during their lives. And in the words of Aschoff, "The histological examination indicates that the great majority of all cases eventually heal, either without treatment or with internal treatment only."

Of 229 cases operated upon in the Toronto General Hospital in 1910, Dr. O. R. Mabee found 52 showing acute inflammation, 22.6 per cent.; 130 with absence of acute signs, and they were reported as chronic, 56.7 per cent.; 23 showed both acute and chronic lesions; 13 were obliterated, or markedly fibrosed; 9 were negative, and 2 were tubercular.

In Sprengel's classification he divides all cases into two main groups:

1. Appendicitis non complicata serosa simplex, which shows slight, or hardly demonstrable peritoneal irritation, and the
2. Appendicitis complicata serosa destructiva, which shows clinically well developed peritoneal irritation.

The first group includes the stages of the primary infection, and of superficial ulceration.

In the second group are found the stages of miliary perforation; of deeper ulceration of the walls and beginning necrosis; and of gangrene and coarse perforations.

BACILLUS AEROGENES CAPSULATUS INFECTION.*

By R. H. PATERSON, B.A., M.B., Hamilton.

THE *Bacillus Aerogenes Capsulatus* was discovered by Welch and Nuttall in 1892, and is identical with the bacillus phlegmonis emphysematosac described at the same time by Fränkel.

Welch obtained the bacillus from the intravascular blood of a case of ruptured aortic aneurism autopsied six hours after death, his attention being arrested by air bubbles in the blood. The bacillus is an obligatory

* Read at the meeting of the Ontario Medical Association, May 31 and June 1, 1911.

anaerobe, and is found in the soil, dust, brackish water, and in the normal intestinal tract of a man and mammals. It is a straight rod, rarely curved, and the average length is from three to six microns. It is variable in length and thickness, and sometimes is almost coccoid. The bacillus in artificial cultures is thicker and shorter than in animal tissues. They are generally single, but often in short chains. The presence of chains in the blood, but never long chains in the artificial regions, serves as a distinguishing feature, between bacillus aerogenes capsulatus and the bacillus anthrax. In animal tissue the bacillus divides by fission, but in the special media-growths it reproduces by spores. The bacillus is non-motile and has no flagella, the capsule is always present. The gas formed by the bacillus contains sixty-four per cent. hydrogen, twenty-eight per cent. carbon dioxide, and eight per cent. mixed, chiefly nitrogen. The gas is ignitable and burns of a blue hydrogen flame. It has been found in the uterus in puerperal infection, and in the foetus dead in utero, and in infectious cases of lungs, pleura, meningitis, and in rapidly necrosing inflammatory and extensive surface emphysema. Herter found the primary anaemias of the pernicious type are ordinarily associated with predominance of the bacillus aerogenes capsulatus in the faeces. The meconium of the babe in a few hours is full of gas bacilli. The case in question is that of a healthy male, age 33, on January 13, 1911, while in charge of a stationary engine, got the leg of his trousers caught in the set screw of a revolving shaft. When liberated the tibia was completely disarticulated, and protruding some four inches, and the wound ground into the dirt, and a large quantity of blood lost. Before the operation, the patient would not give his consent to any treatment other than saving the foot. The patient was given ether, and the fibula was found broken, the internal malleolus torn off, the articular surfaces of the astragalus and the tibia cracked, the periosteum stripped from the tibia and the posterior tibial artery severed. The leg showed slight bruising along the inner side. The circulation in the toes and the foot was very poor. In the preparation of the wound, gasoline and bichloride was used, and the neighboring skin painted with iodine. The cleansing of the wound itself was done by cutting and chiselling away the dirty parts. The wound was drained and loosely drawn together with two or three catgut sutures, and put in a foot splint; on account of shock, the patient was given rectal and interstitial salines, containing whiskey and strychnine per hypo. Twenty-four hours later the patient was very comfortable, the toes warm, and no discoloration in the leg. The temperature 99.5 in the morning, and 100.5 p.m.

2nd day. The temperature rose to 102.5, pulse 96 to 112. 1,500 units of anti-tetania serum given. When the dressing was done there was no pus. One side of the foot appeared dark and mottled. The wound was

irrigated with peroxide of hydrogen and bichloride, and iodoform gauze drainage.

3rd day. Temperature 101 to 101.5, pulse, 88 to 116. The wound, the side of the foot and the inner up half of the leg showed poor circulation and discoloration, no pus, but a dark sweetish discharge. The stitches were removed, and the wound irrigated with peroxide, and peroxide injections were given at times.

4th day. The temperature was 101 to 102, pulse, 100 to 112, the patient was quite rational to the nurses; a darkened area appearing along the calf of the leg, and side of the foot. The wound was dark and dead, and crepitation was found on pressure.

5th day. The temperature was 101, pulse, 102, patient irrational at times. When incisions were made into the calf of the leg, along the intermuscular fascia and subcutaneous fascia, gas bubbled, and a bloody, dark discharge with a sweetish odor was found, and also crepitation was felt in the muscles. Cultures, etc., were taken, and also consent being obtained to amputate the leg without waiting for the laboratory reports. The leg was disarticulated at the knee by Dr. Ingersoll Olmsted, of Hamilton. The main vessels were ligatured, and a few incisions made in the thigh for drainage. The stump was dressed with 10 per cent. carbolic acid and olive oil on lint. No attempt was made to approximate the edges of the wound. Next morning the temperature was 99, and the pulse 80, and strong, and the patient comfortable.

The laboratory report showed, in brief, the direct smear, pus cells and debris and numerous large gram positive bacilli, and by Welch's method showed capsules. When inoculated on deep glucose agar in twenty-four hours showed enormous gas production. The smear showed gram positive bacilli. When transplanted to deep glucose agar with Andrab's indicator-anaerobic, and in forty-eight hours showed great gas production. The cultures and growths were put through the laboratory technique, and conclusively proven to be the *bacillus aerogenes capsulatus*.

On February 11th, the third operation was performed by Dr. Olmsted. When the articular end of the femur was sawn across, the patella sawn in two, latterly, and the freshened patella applied to the end of the femur and held in place by a couple of chromic cat-gut sutures through the periostum, the quadriceps tendon was nicked so as to relieve the tension on the patella, and the wound closed the line of the sutures, being posterior. At the present day it is a shapely stump capable of bearing his weight, giving no trouble, and since the 1st of May the patient has been engineer on one of Hamilton's street steam rollers.

The general symptoms of this infection are important to notice; on account of the high mortality. All pulpified and dirty wounds with their

lowered vitality, present most favourable media for the growth of the bacillus aerogenes capsulatus. The incubation period varies from 48 to 96 hours. The temperature ranges from 102 to 104, quite often not above 102. The action of the bacilli on the nerves and the effects of the pressure from the swelling causes the absence of pain.

The patient looks sick and anxious. The tissues swell, and superficial green, blue blebs appear on the surface, containing a thin serous discharge of a foul sweetish odor. A dark bloody syrup like discharge containing bubbles comes from the wound, and deeper down in the wound, bubbles of gas can be seen rising to the surface. On pressure over the surrounding tissues, distinct crepitation can be felt. The infection travels along the intermuscular and subcutaneous fascia, and not by the blood or by the lymphatics, and there is no pus.

The conservative treatment would be by free skin incisions and injecting hydrogen-peroxide into the tissues beyond the wound and by flushing out the wound itself with peroxide and carrying oxygen into the wound per catheter. This treatment generally leaves you with a dead patient. One cannot trust the most vigorous antiseptic treatment. The only sure and safe way is an early amputation well away from the seat of injury.

608 King St. East, Hamilton, Ont.

DIAGNOSIS OF EXTRA UTERINE PREGNANCY (ABSTRACT).*

By JAMES A. McLEOD, M.D., M.R.C.S. (Eng.), Buffalo, N.Y.

THERE are two main classes of extra-uterine pregnancy:

1. Primary ovarian pregnancy which is very rare.
2. Tubal pregnancy.

Before opening the abdomen it is impossible to differentiate between the various classes and sub-classes of extra-uterine to be absolutely certain until the parts removed by operator are sectioned and examined microscopically.

Symptoms of a classical case are easy and plain, but are rarely seen by the physician. The early history are the signs and symptoms of normal pregnancy, e. g., cessation of mensuration, breast changes, morning sickness, etc. Later we get pelvic pain and an enlarging tumor to one or other side of the uterus displacing that organ to an abnormal position. The pelvic pain is more or less constant. There may be little or no alteration in the pulse or temperature. If the foetus continues to

* Read at the meeting of the Ontario Medical Association, May 31 and June 1, 1911.

develop we get rupture and hemorrhage with their attendant general symptoms.

We make our differential diagnosis by clinical and by laboratory findings.

Clinically we diagnose it from: (a) Appendicitis with abscess formation. (b) Salpingitis with pelvic abscess. (c) Typhoid fever.

(a) In case of appendicitis with abscess, the differentiation is sometimes very difficult without the aid of the laboratory, and especially when the abscess extends into the pelvis. Previous history of former similar attacks or of chronic constipation, sudden onset with nausea and vomiting, marked abdominal pain and right rectus rigidity are prominent signs from the onset of appendicitis; usually no sign of shock or collapse. The uterus may be pushed over to the left side of the pelvis by the abscess. There are no signs referable to the uterus except some uterine condition co-exist.

(b) Pelvic abscesses are either acute or chronic. In both we have a smooth mass to one or other side of the uterus pushed and fixed to opposite side of the pelvis when only one side is involved. In the acute we get sudden onset, rigor, usually preceded by an acute endometritis. In those following miscarriage or abortion we get a history of the miscarriage or abortion; symptoms and signs of a localized peritonitis; marked alteration in pulse and temperature. In chronic we get a history of pelvic inflammation of considerable period of time with acute or sub-acute exacerbations from time to time, usually along with this we get chronic endometritis with a profuse uterine discharge. In both acute and chronic we get alterations of menstruation. In acute we may get temporary cessation; in chronic we usually get profuse flow at irregular intervals, a profuse intermenstrual discharge and marked dysmenorrhoea.

(c) Typhoid fever should not be mistaken for it if we study the case carefully.

In extra-uterine pregnancy the onset is insidious, and in early stages give signs and symptoms of normal pregnancy. It is only likely to be confused with appendicitis or pelvic abscess, at the occurrence of an abortion or rupture followed by hemorrhage. If hemorrhage is severe we get definite signs of collapse and shock. At time of shock the pulse is quickened and temperature lowered; as the patient reacts the temperature rises, and the pulse becomes slower and of better quality. Following the shock we get elevations of both pulse and temperature owing to absorption of fibrin ferment.

In laboratory findings we again have to differentiate between appendicitis and pelvic abscess, and also the different classes of endometritis from the decidual membrane found in the pregnant state. Endometritis

is of course only important, in this connection, when associated with a swelling to any one side of the uterus.

In endometritis we get extensive small cell infiltration in acute; and its replacement by connective tissue is the chronic. We have (*a*) interstitial endometritis in which stroma cells have a variety of shapes and sizes and are imbedded in intercellular substance, (*b*) glandular, in which trouble is confined to glandular parts of the membrane, (*c*) diffuse or fungous where we get a mixture of interstitial and glandular varieties, (*d*) the exfoliative or membranous form in which we get the interstitial tissue changes with well marked small cell infiltration, and the stroma cells are increased in size.

In decidua the cells closely resemble one another, lie closely packed together and are only separated by a thin intercellular substance. In cases of endometritis also we get certain bacteria, the commoner ones being streptococci, staphylococci, gonococci, and bacillus coli communis.

In appendicitis we have at first a marked leucocytosis, with polynuclear forms predominating. Later on when the abscess becomes walled off, the leucocyte count is very much lowered, we may get a lowering of the haemoglobin, no decidual cells in uterine discharge unless complicated with miscarriage. Blood pressure is not much altered, and usually a trace of albumin in the urine.

In acute pelvic abscess we get marked leucocytosis with preponderance of polynuclear forms; vaginal discharge and uterine scrapings loaded with pus, smears and cultures show micro-organisms in great numbers, and in these cases following abortion, the scrapings of the uterus show decidual cells and also chorionic villi. In the chronic type the leucocyte count shows little change, bacteriological findings in uterus and vagina are insignificant, but scrapings show chronic endometritis.

In extra-uterine pregnancy we have, following a hemorrhage of any magnitude, a leucocytosis with polynuclear cells increased, the count does not go as high as in appendicitis and pelvic abscess, and moreover it quickly subsides. We get a marked decrease in red blood cells and marked lowering of haemoglobin percentage. Smears and cultures show few, if any, bacteria, uterine scrapings show decidual membrane instead of normal endometrium, and no chorionic villi. Two cases were reported at considerable length, as follows:

In November, 1908, I reported in a paper, read before the Buffalo Academy of Medicine, a case of primary ovarian pregnancy. Since that date it has been my good fortune to have had a second case. As these cases are peculiarly important from their rarity, and as they demonstrate the importance of careful laboratory investigation, I shall give a brief description of them.

My first case was Miss "X", who gave the following history: Aged 28 years; healthy up to one month ago; her mensuration had always been regular, no dysmenorrhoea, no intermenstrual discharge, and no history of a missed period.

History of the present illness: The illness commenced four weeks prior to my seeing the patient with pain in the abdomen, fever and a blood-stained discharge from the vagina. These symptoms continued and gradually increased in severity until ten days ago, when she was forced to go to bed. The temperature was irregular and marked by the occurrence of several chills.

Condition at the time of consultation on July the 10th, 1908: The diagnosis was pelvic abscess and we were asked to operate for such. My examination revealed the following physical signs: The temperature was 99.5 degrees, and the pulse 100. The tongue was thickly coated. The lung and heart sounds were normal. The breasts were not enlarged or tender. The abdomen was distended and tender, especially so over the left lower quadrant; the percussion note over that area was impaired but not absolutely dull. Per vagina: The hymen was absent, the cervix was soft, and placed in the right side of the pelvis and looked directly downwards; from the external os uteri exuded a blood-stained discharge with a foetid odor; the fundus of the uterus was enlarged, retroverted and pushed over to the right side of the pelvis, and it was quite immobile. The left side of the pelvis was occupied by a large, smooth, apparently fluctuant and tender mass. The diagnosis of pelvic abscess was agreed to, and it was decided to curette the uterus and open the abscess through the vagina. Operation July 11th, 1908; The parts being rendered aseptic smears were taken from the external os uteri and from the vaginal mucous membrane. The cervix was soft, and it was discovered that it needed very little effort to dilate it to the full. Smears and cultures were taken from the cavity of the uterus. The cavity of the uterus was explored, but it did not reveal anything pointing to a placental site. The uterus was then curetted; the scrapings were soft and very bloody, but no active bleeding occurred. A strong suspicion of extra-uterine pregnancy at once arose, and further operative procedure was stopped, pending the report of the laboratory findings.

Report of laboratory findings: The smears and cultures taken from the external os uteri vaginal mucous membrane revealed only a few diplococci, and those from the cavity of the uterus revealed it to be sterile. The uterine scrapings were found to consist mainly of large round cells, and no signs of inflammatory trouble could be made out. The diagnosis of extra-uterine pregnancy was made, and abdominal operation advised as imperative. The patient was most indignant over the diagnosis and refused further operation. Her condition, however,

continued to get worse, and on July 18th, we were called in again and given permission to open the abdomen.

Second operation, July the 18th, 1908: The abdomen was opened by a free incision in the middle line between the umbilicus and the symphysis pubis. The intestines, the uterus and the left ovary were found to be all matted together. The adhesions were broken down and the parts defined as follows: The greater portion of the mass was found to be a large cyst adherent to the upper and posterior surfaces of the fundus of the uterus, and to an extensive area of a coil of the ileum, which was enlarged and very much thickened. The left ovary could not be made out, but the left ovarian vessels, very much enlarged, ran directly into the cyst wall. During manipulation the cyst wall ruptured and a thick, deeply blood-stained fluid gushed out, and with it a small solid body, which proved on examination to be a foetus about one and a half inches in length. The sac was cleaned out, and it was estimated that about one quart of fluid and clot had been removed. An attempt was made to remove the mass from its attachments to the uterus and ileum, but the bleeding was so excessive that we decided to ligate the ovarian vessels; this was done, and the active bleeding at once ceased; there was, however, copious oozing from the raw surfaces on the fundus of the uterus and the coil of the ileum. The mass was then removed with comparative ease. Examination of the right side of the pelvis revealed a multilocular cystic ovary about the size of an orange; this was removed. The right fallopian tube was apparently normal in every way. The oozing from the surfaces of the uterus and the ileum continued copious, making it necessary to place packing in position; this was brought out through the lower extremity of the wound, and the remainder of the wound was closed in the usual manner. The drainage was very free for a few days, it gradually became less in amount, and finally ceased in about ten days; it closely resembled in character and in amount a normal uterine lochial discharge; bacteriological examinations made from time to time revealed it to be sterile. The convalescence was otherwise uneventful.

Examination of the parts removed at operation: The left sided mass consisted of a sac wall, in which was situated a typical placenta; the placenta was two and a half inches in length, two inches in width, three quarters of an inches in thickness. Intimately incorporated in the sac wall was found the left ovary. The right sided tumor was found to consist of one large cyst and numerous small ones, the ovary being practically replaced by the cystic degeneration. Unfortunately the specimens were spoilt before a microscopic examination could be made.

This case was, in my opinion, one of primary ovarian pregnancy, although a microscopic examination and report could not be obtained. The

pregnancy commenced its growth in a graafian vesicle of the left ovary, and as it enlarged it became attached to the fundus of the uterus and to the coil of the ileum. The placenta derived its blood supply from the fundus of the uterus, from the coil of the ileum and from the left ovarian artery; its main supply, however, was from the left ovarian artery through the left ovary, as the active hemorrhage encountered early in the operation was controlled by the ligation of the ovarian vessels.

My second case was Mrs. "H", who gave a past history as follows: Married ten years, one child four years of age, her menstruation had been irregular for years, intervals of five to seven weeks, periods lasting three to five days; a period occasionally missed, one just prior to the onset of the present illness; no history of any similar previous attack.

History of present illness: The onset, 22 days prior to my seeing the patient, was marked by a slight attack of abdominal pain, followed by some collapse, nausea and diarrhoea. The temperature and pulse during the ensuing days, although not typical of typhoid fever were sufficiently like it to make the diagnosis of typhoid fever excusable. The blood was examined twice by the Widal test, and in each instance the report was negative. During the illness, the patient had several slight attacks of abdominal pain followed by some collapse. Five or six days prior to my seeing the patient an irregular blood-stained vaginal discharge appeared; this did not arouse my apprehension in the mind of the attending physician on account of the preceding irregularity in her menstruation. On February 25th, 1910, signs of an intestinal obstruction developed, and on February 26th, I was called to see her for that condition.

My examination: Tongue dirty. Temperature 99.5, pulse, 100. Abdomen: General distention present; muscles on the right side hard and board like; well marked dullness over the right lumbar, right iliac and hypogastric regions. The picture was to my mind typical of a large intra-abdominal abscess, probably of appendicitis origin, and advised immediate operation.

Operation on the same evening. An incision was made over the most prominent part of the swelling. Immediately on opening the peritoneal cavity, a thick chocolate colored fluid gushed out; it had a typical bacillus colon odor. As I did not know whether I had an appendiceal abscess with a secondary hemorrhage into its cavity or an extra-uterine pregnancy with a secondary infection of the blood clot, I decided to simply drain the abscess and have a full laboratory investigation instituted.

Laboratory investigation: Cultures and smears were taken from the pus and revealed the bacillus coli communis and the bacillus pyocyaneus.

The blood pressure was taken and found to be 115. The haemoglobin was estimated and found to be 65 per cent. A leucocyte count was made and found to be 14,000. Some of the uterine discharge was

taken and decidual cells, although not strongly typical, were demonstrated. Cultures from the uterine discharge were made and found to be negative. The urine was examined and found to contain a trace of albumin. Pelvic examination demonstrated that the uterus was slightly enlarged and pushed over into the left side of the pelvis. The right side of the pelvis was occupied by a large fluctuant swelling. The diagnosis of extra-uterine pregnancy with rupture and secondary infection of the blood clot was made.

Second operation, February 28th, 1910: An incision was made in the middle line over the hypogastric portion of the swelling, and the abscess cavity freely opened. Several quarts of chocolate colored fluid and clots were removed. In the position of the right ovary was found a small ruptured and ragged sac, from which there was a slight oozing. The right fallopian tube was found intact in the wall of the abscess. The appendix was located in the wall of the abscess and found to be thickened and kinked upon itself. The small ragged sac and the appendix were removed. The abdomen was closed after providing for ample drainage. Following the operation, vaccines were made from the cultures of the bacillus coli communis and the bacillus pyocyaneus and administered. The convalescence was that of an abdominal abscess, and she was discharged from the hospital on March 26th, 1910. Examination of sac wall removed at operation—Gross: A small piece of beefy succulent material enclosed in a large, partly degenerated blood clot. Microscopic: The section shows fairly typical, but very flattened ovarian cells with stroma very much compressed; on one side a section of corpus luteum is seen. Scattered through the section are a number of cells with faintly staining protoplasm and large regular nuclei, in one case showing mitosis; these cells resemble in every way decidual cells. On one side of the slide is seen a section of the villus of a poorly developed placenta.

This second case was undoubtedly a primary ovarian pregnancy. Rupture of the foetal sac and death of the foetus took place early in the history of the case. At the time of operation the foetus was not discovered it probably had become disintegrated with portions of the blood clot following the secondary infection.

Richard Stein, New York, describes a case that was diagnosed as dysentery with meningeal complications. In the light of recent reports of abortive cases of poliomyelitis he publishes this case as a probable example of this type. The child had marked diarrhoea with blood in the stools, accompanied by unconsciousness, delirium, sleeplessness, restlessness, opisthotonos, stiffness of the neck, and Kernig sign. There was no subsequent paralysis and the child recovered.—*Medical Record*, July 15, 1911.

CURRENT MEDICAL LITERATURE.

MEDICINE.

Under the charge of A. J. MACKENZIE, B.A., M.B., Toronto.

DIABETES MELLITUS.

The teachings referring to diabetes mellitus have received, during the last decade, many new ideas originating from industrious work in the laboratories. In consequence of these additions, our therapeutics have also to be altered so that it was possible for von Noorden to state in the *Medizinische Klinik* for January 1, 1911, that principles which had prevailed for two decades in the ætiology and treatment of the disease could not at present be maintained. We take it at present for granted that diabetes is based upon a hyperglychæmia and that the overcharge of the blood with sugar is the indirect cause of glycosuria. Weiland stated, in the *Deutsches Archiv für klinische Medizin*, 1911, p. 172, that there can exist a diabetic as well as a renal glycosuria, that is, a glycosuria without hyperglychæmia, which is caused by a too great permeability of the kidneys for sugar. While we formerly believed that the cause of diabetic hyperglychæmia was the result of an impossibility of the diabetic organism to consume the sugar normally, we now find Kraus and von Noorden stating that the cause is overproduction of sugar and abnormally increased mobilization of the carbohydrates deposited in the organisms in the form of glycogen and an increased production of sugar from other sources, such as albumin and even fats.

Another question which is now discussed in the medical journals is whether to speak of diabetes mellitus as a disease of localized organs or as a general disease of metabolism or as an anomaly of the constitution. Our present knowledge of the disease seems to point to a local disorganization, whether of the nervous system, the liver, or the pancreas, or a combination of all three. The inner secretion of the pancreas has lately received special attention. The direct regulation of the exchange of carbohydrates is taken care of by the liver, in which organ the surplus of carbohydrate is deposited in the form of glycogen, which, if there should be need of sugar, will then be again transformed into it. The liver also produces sugar from other materials, such as albumin and fats. The action of the liver is regulated by the adrenals and by the pancreas. The product of the adrenals, adrenalin, increase sugar production; adrenalin injection causes glycosuria. The pancreas retards sugar production; pancreas extract prevents adrenalin glycosuria, while pancreas extirpation removes retardation of sugar production. The production of the pancreas, again, is influenced by the thyroid gland which also checks pancreas secretion; in hyperthyroidism we find ali-

mentary glycosuria. But the thyroid gland, again, is influenced by the hypophysis; abnormal secretion of the hypophysis (in acromegaly) causes glycosuria. All these organs and systems are finally dependent upon the nervous system.

This short review gives an idea of the complications in the aetiology of diabetes mellitus.

Professor O. Minkowski, in the *Medizinische Klinik* for July 2, 1911, gives a very good review of our present treatment of diabetes mellitus. He pays special attention to von Noorden's oats cure. He states that we do not know positively upon what factors the results from the oats cure are based. It may be a certain quality of the oat starch; it may be that the oat extract contains certain ferments which stimulate the metabolism of sugar or influence the organs which are concerned in the consumption of sugar. Of most important moment in the oat cure is the restriction of the supply of albumin. Professor Minkowski uses a cure which lasts for three or four days and consists in giving five times daily a soup of fifty grammes of oatmeal with ten grammes of butter and very little salt. He has had very good results from this treatment, even in severe cases of acidosis.

A. Magnus-Levy summarizes the effects of oats cure in the *Berliner Klinische Wochenschrift* for July 3, 1911: The good results of the oats cure are not effected by specific properties of oats; similar, if not as good, results are gained with wheat, rye and barley. The superiority of these carbohydrate cures seems to be based upon negative attributes of the nutriment, especially upon the absence of meat. The advantages of oats over other cereals are to be looked for in the special properties of oatmeal, possibly a fermentation which has not been proved so far.

These oat cures which, by the way, von Noorden mentioned for the first time in the *Berliner klinische Wochenschrift* for September 7, 1903, induced others to try different kinds of meals. Thus von Westenrijk experimented with wheat flour (*Wiener klinische Wochenschrift*, September 3, 1908). He found oatmeal superior to wheat flour; sugar appeared in vastly greater quantity under wheat flour diet. Lampé (*Zeitschrift für diätetische und physikalische Therapie*, p. 213, 1909) tried barley meal and also found the oatmeal superior to barley flour; sugar appeared in quantities not so large in barley diet as under wheat diet. Buckwheat meal was found to stand between wheat and barley. Léon Blum, in *Semaine médicale* for July 5, 1911, and *Münchener medizinische Wochenschrift*, July 4, 1911, reports his observations in thirty-five diabetics. He found that a patient tolerated well great quantities of oatmeal and wheat flour in the beginning of the disease, but not when the malady was advanced. This observation Blum made also in other diabetics; he had the best results from giv-

ing two days of meal, to be followed by one day of vegetable diet. The régime consists in a daily diet of 250 grammes of wheat meal, 250 grammes of butter, and seventy-five grammes of fat. The diet of the vegetable day consists of 100 grammes of bread, 400 grammes of vegetables, fifty grammes of butter, 200 grammes of cream, to which he sometimes adds three or four eggs, or from fifty to seventy grammes of meat. But he warns against indiscriminately using the meal cure; the patients must be carefully watched, and it should always be remembered that the principal aim in a diabetic is to produce a sugar free urine.—*New York Medical Journal*.

HYPERHYDROSIS.

To treat hyperhydrosis, it is generally necessary to institute general as well as local treatment as the outset.

The general treatment consists in the institution of an appropriate *régime* (arthritis, obesity, anæmia, etc., as the case may be), and the administration of astringements, tonics and antisudorifics. Then, one to three wafers, according to the age of the patient, might be given daily, composed as follows:—

Agaric powder, 1 to 3 gr.
 Hydrochl. of quinine, 2 gr.
 Powder of ergot, 2 gr.
 Powder of digitalis, 1-5th gr.
 Powder of nux vomica, 1-5th gr.

for one wafer. No. 20.

The local treatment of general hyperhydrosis consists in daily frictions of the body with a piece of flannel moistened with eau de Cologne or an alcoholic solution of tannin:—

Tannin, 2 dr.
 Alcohol, 1 quart.

Astringent baths may be ordered every two days.

Local hyperhydrosis (hands, feet, axillæ, etc.) requires washing morning and evening with salicylic acid soap, followed by the application of a solution of alum (an ounce to a quart of water) for a few minutes, after which the parts are dried and one of the following lotions employed:—

Naphthol, 1 dr.
 Glycerine, 5 dr.
 Weak alcohol, 6 oz.

or

Tannin, 1 dr.
Spirits of camphor, 6 oz.

or

Permanganate of potash, 15 gr.
Thymol, 15 gr.
Alcohol (weak), 5 dr.
Water, 6 oz.

Brock recommends:—

Formol (commercial), $\frac{1}{2}$ dr.
Alcohol, 6 oz.

employed pure or with the addition of water according to the case.

Ortega prefers:—

Hydrate of chloral, $\frac{1}{2}$ dr.
Water, 6 oz.

In case of intense hyperhydrosis of the feet or hands, it might be preferable, instead of the above lotion, to employ chromic acid, as used at Vienna:—

Chromic acid, 4 to 12 gr.
Alcohol, 1 oz.
Water, 1 oz.

This solution should be painted on the parts only every two or three days; it not only removes the abundance of the sweating, but also the offensive odor.

In the case of palmar hyperhydrosis, the patient will be recommended to wear gloves powdered inside with talc or alum, while for the plantar form, naphthol or boric acid will be placed each morning in the stockings or socks.—*Medical Press and Circular*.

KORSAKOW'S SYNDROME—CEREBRO-PATHIA TOXEMICA.

In the *Maryland Medical Journal*, April, 1911, Herring gives a brief synopsis of the accepted views with regard to this interesting condition. It is generally conceded that the condition is a result of a toxæmia, though the nature of the poison has not been determined; it very frequently occurs in alcoholics, and this appears to be the most frequent cause, but such cases as vide korsakow's 14 in which its influence can be excluded, and in many others while it may be a predisposing element, the condition itself has followed directly upon some acute diseases as typhoid, tuberculosis, gastro-enteritis, and toxic conditions due to lead and arsenic.

SYMPTOMATOLOGY.

The somatic symptoms are typical of a peripheral neuritis. The neuritis may precede or accompany the mental symptoms and be ushered in with vomiting, fever and general weakness, followed by pain and tenderness in the extremities and various sensory disturbances. The knee jerks active at first; later become abolished; the other reflexes diminish; sensory and trophic disturbances develop. Muscular atrophy, contractions and deformities due to permanent paralysis may result. The lower extremity is more often involved, the extensor muscles more often than the flexors.

The clinical forms, as originally described by Korsakow, were:

First. Those cases ushered in or accompanied by delirium.

Second. Those cases with confusion or stupor.

According to Ballet, there are five clinical types:

First. An amnesic form, the chief feature being the marked memory defect for recent events.

Second. The confusional type, the patient being apathetic and indifferent to his surroundings, responding slowly or not at all to stimulation.

Third. The delirious form, in which hallucinations are active. The psychosensory production is marked.

Fourth. The emotional type, in which the patient is apprehensive, anxious, phobias and an exaggerated emotional reaction dominating the field of ideas, which are constantly changing.

Fifth. The dementing type, in which there is a still greater interference with all forms of associate activity and less reactive to stimuli. This asthenic dementing form may terminate in death.

Briefly put, the more important psychic symptoms in disturbances of the mind are evinced by:

1. Hallucinoses, oral and visual illusions or hallucinations.
2. Amnesic disorientation.
3. Impaired memory for recent events, with confabulations, falsifications and pseudo-reminiscences.
4. Hyper-suggestibility.

SURGERY.

Under the charge of H. A. BEATTY, M.B., M.R.C.S., Eng., and A. H. PERFECT, M.D., C.M.,
Surgeons to the Toronto Western Hospital.

THYROID EXTRACT IN CANCER.

Dr. Robt. H. Woods, president of the Royal College of Surgeons, of Ireland, reports a very remarkable cancer cure. The case was a recur-

rent malignant disease of the larynx with involvement of the common carotid artery and the prevertebral muscles. A radical operation would have had a fatal termination. Dr. Woods gave three grains of thyroid extract three times daily. In four months there was marked atrophy of the growth, and in a few weeks thereafter, complete disappearance. Thyroid extract is a powerful alterative, and should be given a trial in inoperable cases.—*Med. News*, London Letter, July 22, 1911.

THE LIFE-HISTORY, FUNCTION AND INFLAMMATION OF APPENDIX.

Edmond M. Corner, F.R.C.S., in the *Medical Chronicle*, March, 1911, deals with topics. He points out that the reduction of food-stuffs from liquid to solid takes place, not by gradations, but fairly quickly in cæcum. Here the alkaline medium, heat, and stagnation of food are all factors in producing a luxurious growth of organisms. The function of the lymphoid tissue of the appendix and cæcum is to control these. The characteristic tissue of the appendix is its lymphoid tissue.

Foreign bodies and concretions tend to aggregate in the cæcum. The first "epidemic" of appendicitis in America was contemporaneous with the preparation of flour for bread by means of big steel rollers of a fluted type. These rollers require replacing very frequently, the material coming off the rollers meanwhile finding its way into the bread. This bread was at first expensive and only consumed by the rich American, the class at that time most affected by appendicitis. The increase of appendicitis in England dates from the introduction of the American method of preparing flour. As this bread became cheaper, appendicitis became more frequent and affected all classes. Later the blacks in America began to use this bread, instead of baking their own, and they, too, became more frequently affected by the disease. Other factors in our diet may also contribute to the frequency of the disease.

Three cases of "unconscious, undiagnosable, unrecognizable appendicitis" are quoted. In two cases the appendix was removed at the patients' desire and contrary to medical advice, because there were no symptoms or signs of the disease, and marked disease of the organ was discovered. The third case was operated on during a supposed first attack, and a stiff bent perforated appendix was found containing four concretions.

The lymphoid tissue of the appendix increases between the ages of 10 and 20, and between these ages appendicitis is very frequent and very fatal. Later the lymphoid tissue gradually diminishes, and may be practically absent at 50.

Children are the most liable to attacks of appendicitis, but their mortality is not the greatest as, owing to their abundant supply of lymphoid tissue, they are well able to resist attacks. Older subjects have developed immunity to toxins developed in the cæcum, but are less able to withstand a severe attack of micro-organisms from lack of lymphoid tissue, and so the death-rate increases regularly in each decade after 20.

Carcinoma of the appendix has of late been found to occur fairly frequently, and has been found in children of 9, 10, 11, and 12 years of age, but its prognosis is comparatively good. Many of these cases are only discovered on microscopical examination.

The appendix, he considers, should be removed more frequently than it is.

SURGERY IN THE ABDOMEN.

Childe says that surgery, being the simpler science, has naturally outstripped medicine in the treatment of disease generally, and in the present stage of the evolution of the science of healing the abdomen is almost exclusively surgical. All must recognize, however, that, at best, surgery, notwithstanding all its modern refinements of technique, is a somewhat crude method of treating disease; and there are not wanting signs that many abdominal diseases, especially those of microbic origin, may in the not distant future revert to the province of the physician and be cured by methods less drastic and more scientific than the knife; and it is probably not a vain prophecy that future generations of medical men, with their hypodermic syringes in the pockets, will marvel at the barbarous methods we employed of treating abdominal disease early in the twentieth century. Childe mentions Cæsarean section, appendicitis, intestinal obstruction, pelvic cases in women, gastric and duodenal ulcer, gallstones, and retroversion of the uterus as cases where the surgeon must interfere in the present state of our knowledge.—*British Medical Journal*, July 22, 1911.

TREATMENT OF FRACTURES.

Lèche reports a case as follows: The patient, an active man, aged sixty-seven years, was run over by a cart, and sustained an oblique fracture of the tibia at the junction of the middle and lower third, while the fibula was broken near the ankle joint. The fragments were kept in position with some difficulty, gentle massage began early, and a good result seemed probable, but at the end of five weeks there was not the slightest union, and three weeks later there was no improvement. With

help Lèche exposed the end of the bones and found a disc of bone the size and thickness of a shilling between the ends of the tibia, lying quite loose. This was removed, and the ends freshened and finally fixed in position by means of a steel plate and six screws, by Mr. Arbuthnot Lane's method. The tension necessary to fix the bones in good position was considerable, and his long bone fixation forceps were indispensable. There was much oozing from the medulla of the bone, but the plate buried beneath the muscles caused no irritation, and he made a good recovery, with excellent union. The patient died unexpectedly two months after the operation. The specimen obtained showed perfect union in very good position. The three inch plate had not moved in the least, but two of the screws were beginning to get loose.—*British Medical Journal*, July, 29, 1911.

END RESULTS IN GALLBLADDER SURGERY.

Stanton states that in the hands of those qualified to undertake the work, the operative treatment of gallstone disease is one of the most satisfactory branches of surgery, and the cures may be safely estimated at over eighty per cent., while the majority of the remainder are so greatly benefited as fully to justify the operation. The most favorable cases in all respects are those in which the stones are still confined to the gallbladder. The operative mortality in these uncomplicated cases is almost nil, and the proved end results are practically all that could be desired. These two facts in themselves should enable us to settle any question as to the proper time for operation. The most important principle of gallstone surgery is the complete removal of the stones, with the least possible damage to the biliary tract. Overlooked stones are probably the most important simple cause of uncured patients. If, as a result of the operation, all obstruction within the biliary tract are removed, a cure is almost certain to result. No evidence has been found in his series of cases to show that cholecystectomy should ever be the operation of choice in gallstone cases, unless there be chronic cystic duct obstruction or the gallbladder so diseased as to make a cholecystectomy technically safer and easier to perform than a cholecystostomy. Every effort should be made to guard against postoperative hernia. A guarded prognosis should be given in cases complicated by pelvic lesions. In his series, operations for cholecystitis without stones did not show better results than could probably have been secured by medical means, and unless better results are obtained in this class of cases in the future, surgeons should learn to avoid them.—*British Medical Journal*, August 5, 1911.

SURGICAL INTERFERENCE IN CANCER.

Paine and Nicholson think they have been able to show experimentally that incomplete removal of a carcinoma is often followed by a rapid recurrence of greater virulence than that of the original tumor, and that this increase in the virulence is mainly due to the remaining fragments having a very rich blood supply. It merely remains to say a few words on the technique employed at their operations, which is as follows: Ether has always been used as an anæsthetic. Mice stand it well, and usually run about their cage in a normal manner within an hour of its being stopped. The operations were performed under the strictest aseptic precautions. After sterilizing the skin an incision was made whose length depended on the size of the tumor well in front of it. On reflecting the skin the tumor, unless it has infiltrated the muscles, adheres to its deep surface. After ligating the blood vessels, the tumor is removed, together with an elliptical flap of skin to which it adheres. By varying the size of this flap they can remove as widely as is necessary. In those cases where the operation was purposely made an incomplete one, they cut and shelled the tumor of the skin, and were thus able to leave pieces of it behind it in connection with their blood supply. The wound was closed with silk. No dressings were applied. Primary union resulted in all cases in which there was no recurrence in the scar itself. Except in one or two of the earliest experiments they have never had any signs of sepsis.—*British Medical Journal*, July 22, 1911.

INTESTINAL STENOSIS.

J. Schnitzler (*Wien. med. Klin.*, Nos. 11 and 12, 1911) deals with practical points in connection with the intestinal stenosis. Severe general symptoms are often absent in the early stages of intestinal obstruction, but they may be present from the beginning, especially in cases of strangulation involving a large piece of intestine or mesentery, and they invariably supervene when the intestine becomes stretched above an obstruction. Errors of diagnosis are not uncommon. In case of trauma invagination may occur and be overworked. Early peritonitis may stimulate intestinal obstruction, and a circumscribed peritonitic paralysis of a part of the intestine may give rise to all the symptoms of paralysis, while a generalized peritonitis due to perforation may fail at first to do so. Two cases of perforation of gastric ulcer are described in which the patients recovered as a result of treatment which aimed only at removal of obstruction. In one of these cases Schnitzler did not see the patient until the sixth day after the perforation. The general condition was then so

good, the pulse 90 to 100, temperature 36.8 degrees C. (98.2 degrees F.), that it was decided that the general infection of the peritoneum had been overcome, but that the symptoms of vomiting, constipation, etc., were due to intestinal obstruction. At the operation turbid exudate and gas were present in the peritoneal cavity and the small intestine was enormously distended; a loop of intestine with a thickened and somewhat oedematous wall was stitched into the abdominal wound and opened, and gas and fluid contents of the small intestine poured out in large quantities. Recovery was so rapid that faeces began to be again passed per anum six days after the operation, and the fistula healed spontaneously within a few weeks. Other instances are given of the significance of enterostomy in the treatment of peritonitis, but obviously cases of generalized paralysis of the intestine will not be suited to this treatment. For successful operative treatment a diagnosis should be made before the onset of faecal vomiting. Auscultatory phenomena may be of great use in establishing a diagnosis. The author considers that high pitched metallic murmurs, sometimes audible even at a distance, point to acute or sub-acute intestinal stenosis. The presence of colicky pains, of sounds such as those described above, and the absence of stools and flatus passed per anum are sufficient evidence upon which to base a diagnosis and to undertake an operation. In such cases, due to peritonitis, the author's method is the formation of one or more fistula, as in the case previously described. He considers high irrigation to be seldom useful and to be dangerous in peritonitic processes. He gives a small enema, and if this is without result advises enterostomy within twenty-four to forty-eight hours at latest if no stool is passed. His experience of operative treatment of peritonitic intestinal obstruction now extends to nearly 100 cases, and he describes his technique with regard to the formation of artificial intestinal fistulae. When threatening symptoms recur after the formation of the first fistula, search is made for other distended loops of intestine, and the author has known recovery to follow four such fistulae have had to be opened up. Where no neoplasm nor other real and permanent obstruction is present the passage of stools per anum invariably begins after a few days, and in the great majority of cases the peritoneal adhesions disappear later. Most of the cases of peritonitic stenosis of the intestine belong to the appendicitis group of cases. The author has three times been obliged to operate months or years later to free the loop of intestine from the intestinal wall because of symptoms due to fixation. Operation is undoubtedly the only real treatment if intestinal stenosis, and the direct removal of the obstruction is the ideal treatment. In cases of pronounced meteorism, or where faecal vomiting has been present for some time, radical treatment is often dangerous to the patient and recovery will frequently follow the milder procedure of the formation

of a fistula. The author concludes by the statement that he prefers to operate at the right moment under a wrong diagnosis than at the wrong moment under a correct diagnosis.—*British Medical Journal*.

POST-ANÆSTHETIC PSYCHOSES.

Mitchell (*Amer. Journal of the Med. Sciences*, July, 1911) records an investigation into 344 case histories, in order to find out how many of the patients showed any evidence of post-operative or post-anæsthetic mental trouble. The patients were very carefully selected, and, as far as possible, instances in which distinct neurasthenia was present before operation were excluded, and only those patients of whom accurate notes had been taken were included. The operations varied very widely from the most simple to the most extensive. Of the 344 patients, 220, or 64 per cent., were women, and 124, or 36 per cent., were men. Mental trouble was found to follow the operation or anæsthetic in 31 cases, or 9 per cent. of the patients examined. Of these 31 patients, 29 were women and two were men. A possible factor in the explanation of this preponderance of women may be the number of operations undertaken for diseases of the female reproductive organs. The most severe nervous disorder has not by any means always followed the most serious operation, and Mitchell thinks that mental factors and fear of the operation play a larger part in the subsequent recovery of the patient than is generally attributed to them. In only one of the 31 patients was there any surgical complication in the course of the illness, the majority of the patients making an uninterrupted surgical recovery. No special investigation seems to have been made with regard to the anæsthetic used or the method of administration. As a result of these investigations, Mitchell urges that more prolonged rest and isolation of the patient after operation than is considered necessary for purely surgical reasons should be insisted on, and he believes that such a course will be followed by excellent results in avoiding post-operative nervous complications. With regard to the undertaking of operations in neurasthenic patients, the only justification for such a course is that the procedure is one which would be absolutely demanded were the patient in perfect nervous health. "Above all, the operation should never be recommended with the idea or even the hope that if successful it will cure the neurasthenia."—*Medical Press and Circular*.

PERSONAL AND NEWS ITEMS.

ONTARIO.

Dr. W. Fred Park has been nominated for South Essex.

Dr. Arthur W. Mayburry, Toronto, has gone to Europe for a trip.

Dr. Maloney will run as a parliamentary candidate in South Renfrew.

Dr. Harry D. Livingston, of Rockwood, is to be one of the new additions to Toronto's medical population.

Dr. Mylks has resigned the chair in applied anatomy in Queen's, and is succeeded by Dr. Morrison.

Dr. R. J. Kee, of Esterhazy, Sask., has removed to Toronto and devoted himself to diseases of the eye, ear, nose, and throat.

Dr. George Routledge has been nominated as one of the candidates in East Middlesex.

Dr. D. O. Alguire will be a candidate in Stormont for the House of Commons.

Dr. J. W. Edwards will again run for the Federal House in the County of Frontenac.

Dr. J. D. Reid will run in Grenville. He was the member in the last parliament.

The University of Birmingham has conferred on Dr. R. A. Reeve, of Toronto, the honorary degree of LL.D.

Dr. Vrooman has been placed in the field as a candidate in Lennox and Addington.

Dr. George Glionna, of Toronto, the first Italian graduate in medicine, was given a banquet by compatriots a short time ago.

Dr. Morely Currie is again one of the candidates in Prince Edward County. He sat for the same riding in the last house.

The cottage of Dr. Williamson, Grimsby Beach, was completely destroyed by fire on 10th August.

Dr. J. L. Chabot is aspiring to political honors in Ottawa, as one of the candidates in the coming election.

Clean vegetables, kept in a clean manner, and sold under clean conditions, are Dr. Hasting's ideals for Toronto.

Dr. P. A. Dewar will be a parliamentary candidate in North Essex. Dr. Dewar lives in Windsor.

Dr. S. Moyer, of Preston, is in the field for South Waterloo, as a candidate for the Commons.

Dr. Bruce Riordan spent some time in New London, Conn., recuperating after his long illness.

Dr. Geo. A. Bingham, of Toronto, is doing well. This is good news to many.

Dr. A. J. Brown, of Holstein, has gone to Britain for a year of special study.

Dr. Reid, of Toronto, has been made fellow of the Royal College of Surgeons, England.

Dr. James A. McCammon, of Gananoque, has been appointed sheriff of the counties of Leeds and Grenville.

Dr. A. Stewart, of Palmerston, has sold his vaccine farm and has removed to Toronto. Dr. W. A. Scalon, of Algonquin, Ont., has taken his place.

There were 232 medical students in Queen's Medical Department last session. This was the largest attendance in the history of the medical college in Kingston.

Dr. J. P. Rankin, of Stratford, is again a candidate for parliament for North Perth. When the house dissolved he was member for the constituency.

The Asylum grounds of 35 acres, on Queen Street, Toronto, have been sold to the Grand Trunk and the Massey-Harris Company. The price was \$1,025,000.

The jury that investigated the fire in the Hamilton Asylum, among other things in its verdict, concluded that all such buildings should be of the fire-proof type.

Sir W. W. Cheyne, professor of clinical surgery in King's College, London, paid a visit to Toronto a short time ago on a pleasure trip to this country.

An effort is being made in Toronto to have the charities work in unison, so as to avoid overlapping of help and the evil of assisting those who are really not entitled to such charity.

Dr. Hastings reports a considerable drop in contagious diseases in Toronto for July: Diphtheria, 92; scarlet fever, 69; typhoid fever, 25; measles, 7; tuberculosis, 10.

In Toronto during July there were 917 births, 495 marriages, and 560 deaths. This is a slightly higher birth and death rate than for July, 1910.

Dr. Angus Graham, of London, had a narrow escape from death a short time ago. His automobile was struck by a freight train and completely smashed. The Doctor escaped almost uninjured.

In the Ottawa epidemic of typhoid fever there were over 900 cases, and 52 deaths. In round numbers this represents a loss in life and time worth at least \$50,000.

Harry Davis, a short time ago, while working at Welland, received a charge of 4,000 volts. He was taken to the Memorial Hospital at Welland, and is reported to be recovering.

Dr. G. Sterling Ryerson has returned from Europe. After attending the meeting of the British Medical Association in Birmingham, he visited London, Paris and Berlin, paying special visits to the Radium Institutes in these centres.

A child which had suffered with diphtheria, and was cared for in the Toronto Isolation Hospital, died a few days ago after being sent home. Coroner Young found that the child completely recovered from the disease, but had still a weak heart.

A number of leading citizens of Peterborough have formed an association to fight tuberculosis. They purpose establishing a hospital, a sanatorium, a dispensary, using district nurses, etc., to accomplish their objects.

It has been decided to use \$10,000 of the relief fund for northern Ontario for the purpose of establishing a hospital at Porcupine. The relief fund rose to about \$55,000. Notice was issued that no further money was required.

The Canadian Medical Protective Association is still growing and doing good work. The fees taken in during the past year amounted to \$2,139, and the cash on hand is now \$6,807. Some ten or more suits were threatened against members, but these were dropped, as no doubt the influence of the association had a deterrent effect. One case was lost, which is the first since the association was organized.

QUEBEC.

Dr. Hayes, of the county of Richmond-Wolfe, Que., is a candidate for parliamentary honors.

Dr. Beland, member for Beauce, Que., has been taken in the cabinet and given the portfolio of postmaster-general.

The smallpox outbreaks in a number of places in Quebec are said to be now under control.

Dr. T. G. Roddick is now making a good recovery from his recent severe illness.

For the month of July the deaths in Montreal numbered 1,175, and 837 of these were of children under 5 years of age.

McGill University has received through Lady Graham \$10,000 for the Browne Memorial Fellowship.

Two brass tablets have been placed in the Western Hospital, Montreal, to the memory of Drs. F. W. Campbell and W. H. Drummond.

The announcement for session 1911, 1912, of McGill Medical College is out. It is got up in very attractive form, and gives full information to intending students.

During the month of July there were 1,175 deaths in Montreal; and, of this number, 837 were among children under five years of age. This is one of the worst records in the history of the city.

During 1910 there were 714 patients admitted into the Montreal Maternity Hospital. Of these 703 completed their period, of whom two died. The average stay was 17.6 days. There were 27 still-born children, and 31 died in the hospital.

Dr. B. Pelletier, speaker of the Legislative Assembly for Quebec, has been appointed commission representing the province in London, England. Dr. Pelletier has represented the county of Sherbrooke since 1897. He has been speaker of the Legislative Assembly since 1909.

Dr. Andrew MacPhail, of Montreal, the editor of the journal of the Canadian Medical Association, is doing well. One eye has recovered from the injury sustained; and the other eye is doing better than was at first hoped for. Congratulations and best wishes.

Dr. J. E. Laberge has asked the Montreal council for the establishment on the mountain of a sanatorium for incipient cases of consumption. Those patients would sleep out at night, receive suitable food, and have their lives directed by a physician. They would be taken to and from work in special cars. This would lessen the spread of the disease.

The new medical buildings for McGill University are opposite the Royal Victoria Hospital. The college authorities received \$336,000 insurance from the buildings destroyed by fire four years ago. There were some gifts that brought the total up to nearly half a million. To this sum Lord Strathcona added five hundred thousand dollars. The new buildings represent, therefore, about one million dollars of investment. The buildings are very complete in every detail for teaching purposes. *Très bien.*

MARITIME PROVINCES.

Dr. D. H. McAllister is one of the candidates in Kings and Albert.

Dr. P. C. Murphy, of Prince, in Prince Edward Island, is a candidate for parliament.

Dr. J. B. Black, of Hants, is again a candidate for the Federal House. He had charge of the amendments to the medical bill last session.

Dr. A. B. Atherton, so well known by many of the practitioners of Toronto, is a candidate for parliamentary honors for a New Brunswick constituency.

The will of the late James Cosman, of Meteghan, Digby, N.S., leaves an estate estimated at \$600,000. After making a number of small bequests he bequeaths all his property to three trustees to be appointed by the Archbishop of Halifax, to be sold and invested in securities, but directs that no Government bonds shall be bought where the funds may be used by such Government for wars of conquest. When these annuities shall cease, through death or otherwise, the accumulated funds of the estate shall be divided into two equal parts, one of which shall be handed over

to three trustees to be appointed by the Bishop of Rapahoe, Ireland. The remaining half shall be kept invested in Nova Scotia, and be used by the Nova Scotia trustees for the benefit of the poor of Nova Scotia as the trustees deem best. The other half of the income shall be invested in trust securities, and allowed to accumulate for one hundred years, or longer if necessary, to provide an amount to establish hospitals or homes in Nova Scotia for the needy, where they may end their days in comfort. The county of Digby shall first be provided for.

WESTERN PROVINCES.

Dr. Molloy has been nominated to contest Provencher, in Manitoba. Dr. W. D. Cowan is a candidate for the House of Commons in Regina.

The new General Hospital in Regina has been formally opened. The function was well attended, and the arrangements were in the hands of the Ladies' Aid Society.

Dr. Morell, editor of the *Western Medical News*, is a lieutenant in the Sixteenth Light Horse. He was in camp for the training of the Canadian militia.

The officers of the Manitoba Medical Association are: President, Dr. H. P. Galloway; 1st Vice-President, Dr. D. J. Ross; 2nd Vice-President, Dr. J. S. Poole; Secretary, Dr. J. Halpenny; Treasurer, Dr. R. F. Rorke; Ex-Committee, Drs. G. Camsell, G. Clingen, S. W. Prouse, Cecil Parr, and R. B. Culbertson.

FROM ABROAD.

The third annual meeting of the American Association of Clinical Research will meet in Boston on 27th and 28th September.

In India from January to June of this year there have been 650,690 deaths from the plague.

M. Furneaux Jordan, one time a distinguished surgeon of Birmingham, died recently at the age of 81.

Hermann Senator, professor of medicine in the University of Berlin, died recently in his 77th year. For forty years he was one of the most distinguished teachers and consultants in Europe.

In the early months of spring, several cases of the plague were reported in Auckland, N.Z. The infection was found in rats examined at the time.

Throughout Australia very marked attention is paid to health matters. Inspection of schools is doing good work. The medical health officers are vigilant in the interest of the people and in food, etc.

There were several cases of genuine Asiatic cholera in France during July. The disease is said to have been caused by fruit imported from Italy.

Dr. H. T. Bulstrode, who has done such very fine service for the Local Government Board, England, died on 21st July, of heart failure, at the age of 52.

In Vienna last year the number of suicides was 596, or about 2 per cent. of the total death rate. This condition has been constant for the past five years.

It is notified from Buckingham Palace that His Majesty has received from his Highness, Sir Madho Rao Sindhia Bahadur, Maharajah of Gwalior, the sum of £8,000, commemorative of the Coronation, for such charitable institution as the King should indicate.

Dr. Grenfell sailed from New York on the last day of July for his work in Labrador. He took with him a plentiful supply of everything he thought he might require. He had on board a good medical and surgical outfit.

Dr. Thomas Clouston and Dr. James Affleck, both of Edinburgh, have had the distinction of Knighthood conferred upon them by the King when he paid his recent visit to Edinburgh. Dr. Clouston is noted for his work on mental diseases, and Dr. Affleck for that in general medicine.

One of the outstanding features of the National Insurance Scheme before the British Parliament, is that the Royal Colleges have condescended to ask the co-operation of the ordinary licentiate and members, who was never before consulted by the governing councils of these bodies. Truly Shakespeare said: "It is an ill wind that blows nobody good."

News despatches to The Paris Midi from Marseilles quotes Dr. Dopfer, correspondent there of the Pasteur Institute, as saying that there have been 37 cases and 20 deaths from cholera in Marseilles. Dr. Torel, chief of the Municipal Sanitary Service of Marseilles, has established a special hospital for the care of these cases.

The report of the Imperial Cancer Research Fund has just been given out for 1910 and 1911. It goes to show that there is no real increase in the frequency of the disease, that it is almost wholly due to irritation as in certain trades and parts of the body, and that there is a constitutional proclivity to it.

The University of Cincinnati has adopted a noted change in its medical course. During the last two years of study the students spend one-half of their time in the usual hospital and clinical studies, and the other half in the work of the board of health. This is intended to make the graduates familiar with the principles of preventive medicine.

Dr. Robert Soundby, of Birmingham, president of the National Temperance League, has issued a statement in which he deplores the great increase in the use of tobacco. It appears that the habit of cigarette smoking is becoming quite common among English women. One London physician, in discussing the subject that two-thirds of his women patients used tobacco.

An official cholera bulletin from Italy shows that there have been 105 cases at Palermo, with 50 deaths. In the province of Palermo there were 52 cases and 24 deaths; at Naples, 58 cases and 15 deaths; at Salerno, 84 cases and 25 deaths; Caserta, 30 cases and 14 deaths; Trapani, 15 cases and 3 deaths; Avellino, 7 cases and 3 deaths; Capabosso, 5 cases and 2 deaths; and at Leghorn, 5 cases and 2 deaths.

His Majesty accordingly makes the following apportionments:—

King Edward's Hospital Fund for London	£2,000
Royal Naval Fund for the Relief of Widows and Orphans	1,000
War Office Compassionate Fund	1,000
Civil Service Benevolent Fund	1,000
Metropolitan and City Police Orphanage	1,000
Fresh Air Fund	1,000
Ragged School Union and Shaftesbury Society	1,000

BOOK REVIEWS.

COMMISSION OF CONSERVATION.

Report for 1911, dealing with Lands, Fisheries and Game and Minerals. Hon. Clifford Sifton, Chairman, James White, Secretary. Ottawa: The Mortimer Press Coy., Ltd.

One of the most valuable publications of the year is the volume just issued on "Lands, Fisheries, Game and Minerals," by the Dominion Commission of Conservation. The book, representing as it does a great deal of exacting research work, makes available to the average man a mass of instructive and entertaining information otherwise unobtainable by him. As a reference work for the journalist, the student of public questions and the well informed man on the street, it will be found of no small value. It is a large volume of some 525 pages, substantially bound in cloth and fully illustrated throughout with maps, diagrams and two-color photo engravings.

The section devoted to Lands describes the agricultural survey of one hundred representative farms in each province, made by the Commission of Conservation in order to ascertain just what the condition of agriculture is in Canada. Some of the subjects on which information was obtained are: rotation of crops, use of manures, prevalence of weeds and insect pests, water and fuel supply and the use of selected seed. One of the striking facts revealed is that not more than nine per cent. of the farmers of Canada follow any intelligent and effective rotation of crops. By the adoption of more scientific methods which could readily be put

into effect, it is estimated that the field crops of the country could be doubled in twenty years. The report is replete with agricultural information, valuable because it is not hearsay, but a statement of actual facts scientifically obtained by men in the field. An article on Agricultural Production in Canada indicates just what each province has produced of field crops, fruit and live stock since 1891, and also gives crop areas and comparative crop yields.

The section on Fisheries and Game is a valuable compendium of facts and conclusions by various experts. On account of the frequent disputes over jurisdiction in the case of fisheries between the provinces and the Dominion, an analysis is given of the clauses of the British North America Act referring to fisheries, showing what powers each authority has. Following this is a digest of the Federal and Provincial fisheries laws and regulations.

Mr. James White, Secretary of the Commission, has an important article on the North Atlantic Fisheries Dispute in which he traces the historical development of the case leading up to the late Hague arbitration, gives the terms of settlement and recounts the advantages accruing therefrom to Canadian fishing interests.

The Canadian Oyster Industry is dealt with by M. J. Patton, Assistant Secretary of the Commission. The statement is made that Canada pays out annually over \$350,000 for oysters imported from the United States, when the natural conditions in this country are excellent for producing all that is required for home consumption. The Canadian output has decreased from 64,646 bbls. in 1882 to 38,535 bbls. in 1909, in spite of the fact that prices have risen 240 per cent. in the past 20 years. This degeneration of the industry is due very largely to the long-standing dispute over jurisdiction between the Provincial and Dominion authorities, which has left the oyster fisherman in such a state of uncertainty as to his holdings that he will not undertake the artificial cultivation of oysters. The article relates the experiments of other oyster-producing countries and shows that the only means of rehabilitating the industry is by definitely settling the jurisdictional dispute so that oyster culture may be confidently engaged in by private individuals.

Mr. C. W. Gauthier, a practical fisherman, in an article on "Whitefish in the Great Lakes," strongly advocates the establishment of more hatcheries for the artificial propagation of that species of fish. Maps are reproduced showing the area frequented by whitefish in each of the Great Lakes. Following these, is a statistical article on Fish Culture in Canada, which points out that last year only fifty-six per cent. of the appropriation voted for this purpose by the Dominion Parliament was expended. In other articles the fisheries of Manitoba, Prince Edward

Island and British Columbia are described and measures necessary for their conservation suggested.

In the section on Game there is a full description of the game and game fisheries in Nova Scotia, Prince Edward Island, Quebec, Saskatchewan and British Columbia. This portion of the report will be found of especial value to the sportsman in search of good hunting and fishing territory. At the end of the section a statistical article gives the amount of revenue derived from the fishery and game resources of each province.

The minerals section of the report opens with a summary of the Provincial and Dominion laws and regulations respecting mining. An exhaustive article on the conservation of mineral resources, by W. J. Dick, Mining Engineer for the Commission, take up each mineral of economic importance in Canada, showing the extent of the deposits, the consumption, and the methods of mining; and recommends measures for conservation. Mining accidents in Canada and in foreign countries are fully dealt with in another article and suggestions are advanced pointing out how the heavy death rate in Canada from this cause may be reduced.

The volume is perhaps the most thorough and complete record of investigation and research that has ever been issued by any government in Canada.

SURGICAL PROBLEMS.

One Hundred Surgical Problems, the Experiences of Daily Practice, Dissected and Explained, by James G. Mumford, M.D., Visiting Surgeon to the Massachusetts General Hospital; Instructor in Surgery, Harvard Medical School; Fellow of the American Surgical Association, etc. Boston: Wm. Leonard Publishing Company, 1911. Price, \$3.00.

"One Hundred Surgical Problems" by James G. Mumford, M.D., is a book of clinical histories in which we see not detached groups of symptoms, but actual patients and real persons.

It presents one hundred selected cases, well classified in groups to show the phases of each subject, with statement of symptoms and thorough discussion to Diagnosis, Treatment and Results.

Of the value of this kind of book there is no question. As the preface states, "The method in proper hands is luminous and the lessons instantly comprehensible."

Certain groups of cases, as those of the stomach and duodenum, Graves' diseases, digestive disorders are worthy of special mention. In the last named series are ten full page x-ray plates showing ptosis of the large intestine. These are equally valuable to the internist and the surgeon, and superior to any work published up to the present in this field.

Each case history has been thoughtfully considered and well written, in accord with a style which Dr. Mumford has made his own. The book comprises a valuable post-graduate course in surgery presented in most interesting forms.

INTERNATIONAL CLINICS, VOLS. I AND II., 1911.

A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery and the other Departments of the Healing Art. Edited by Henry W. Cottill, A.M., M.D. Philadelphia and London: J. B. Lippincott & Company, 1911.

Vol. I. contains articles on diagnosis and treatment, medicine, pædiatrics, surgery, ophthalmology, physiology, anatomy, biology, tropical medicine, and the progress of medicine during 1910.

Vol. II. contains articles on medicine, surgery, obstetrics and gynæcology, neurology, laryngology, ophthalmology, pathology, and post-graduate course. These articles bear the stamp of very thorough preparation, and will repay careful study.

REFRACTION OF THE EYE.

The Errors of Accommodation and Refraction of the Eye and their Treatment and Handbook for Students, by Ernest Clarke, F.R.C.S., Eng., M.D., B.Ch., Lond., Surgeon to the Central London Ophthalmic Hospital; Consulting Ophthalmic Surgeon to the Miller General Hospital. Third edition. London: Bailliere, Tindall & Cox, 8 Henrietta Street, Covent Garden, 1911. Price, 5s. net.

Those who are familiar with the work of Mr. Ernest Clarke know how carefully and thoroughly he does his work. This volume is the very best of the class that goes into everything with care and thoroughness. We congratulate the author in being able to present the profession with such a complete work on refraction in such comparatively small bulk. The type, paper, and illustrations are excellent. The colored plates are specially good. The book merits the highest commendation.

OBITUARY.

DENIS P. LYNCH, M.D.

The death took place on 10th August, at Almonte, of Dr. Denis P. Lynch, after an illness of only one week, at the age of 54 years. He was one of the most prominent medical men in Eastern Ontario. He was president of the Liberal Association of North Lanark, and had been

actively connected with the North Lanark Town Council and the local militia. In religion he was a Roman Catholic. He is survived by his widow and three sons, Dr. John, Sydney, N.S., Maurice, Ottawa, and Desmond, at home.

LOUIS A. TRUDEAU, M.D.

Dr. Louis A. Trudeau, a well-known resident of Montreal, was instantly killed some four miles from St. Hyacinthe, 13th August, when the automobile in which he and two friends were motoring to the political meeting there upset at a sharp curve in the road. Dr. Trudeau was 35 years of age, and leaves a widow and four children. The victim's father, who was in the machine at the time, states that they were travelling at 25 miles an hour.

JOHN A. SCOTT, M.D.

Dr. John A. Scott, who for a number of years resided in Maxwell and had a large practice in this community, died on 3rd August, at Collingwood, where he had recently been living as a helpless invalid for some time with paralysis.

Dr. Scott, who was over fifty years of age, was raised in Osprey township, and was in the teaching profession, before entering medicine. He was active in municipal and political matters, a prominent Orangeman and a member of the Masonic Order.

JAMES JOHNSON, M.D.

Dr. James Johnson, one of the most prominent physicians and widely-known men in and around Milverton, died at his home at Millbank, 2nd August, in his seventy-fourth year. He had spent the winter in California in an attempt to regain his health, and had improved considerably, but caught cold on his return trip, causing an abscess to form in his ear, which broke inwardly, causing his death.

The doctor was one of the pioneers of the district, settling in Mornington fifty-three years ago, when the country was practically a wilderness. He practised continuously until broken health compelled him to retire. His municipal career dates back to the early eighties, when he was Reeve of the township for several years. In 1888 he contested North Perth in the Liberal interests for the House of Commons, but was defeated by Mr. S. R. Hesson of Stratford on the Louis Riel

issue. Dr. Johnson was a man of a generous and kindly disposition, and a great contributor to charitable and public institutions. He was prominent in the Presbyterian Church and in a number of fraternal societies.

WILLIAM McCAMUS, M.D.

Lindsay lost a good citizen in the person of Dr. McCamus, whose death took place 15 August, at his residence, corner Sussex and Wellington Streets, Lindsay. The doctor had only been ill four or five days. The late Dr. McCamus spent most of his life in Bobcaygeon, retiring from active practice a few years ago, and taking up his residence in Lindsay. He graduated from Victoria in 1869.

GEO. A. HETHERINGTON, M. D.

Dr. Hetherington died at his home in St. John, N.B., 14th June, as the result of injuries sustained by falling down an elevator shaft. He was a graduate from the University of Michigan. Later on in 1876 he studied in Cincinnati College of Medicine, where he took a degree. He also studied in Dublin and Edinburgh. In 1896 he was appointed Medical Superintendent of the Provincial Lunatic Asylum. He took an active interest in the local and Maritime Medical Associations. He held a number of public offices, such as coroner, etc. He was also active in military affairs.

HOWARD M. CHURCH, M.D.

Dr. Church died recently in Montreal in his thirty-ninth year. For ten years he held the position of demonstrator of anatomy in McGill. He was also surgeon-general in the garrison artillery.

HENRY SCANLAN, M.D.

Dr. Scanlan died at his home in Montreal, a short time ago. He took an active interest in athletic sports.

MISCELLANEOUS MEDICAL NEWS.

THE ONTARIO MEDICAL COUNCIL. REPORT OF MEETING.

The annual meeting for 1911 began in Toronto on 25th July. The meeting of this year will long be remembered as one of the most important in the history of the medical council. A number of radical changes were made, and others indicated for the near future.

EXAMINATIONS.

Dr. E. Ryan, of Kingston, took the lead in an effort to have the number of examinations reduced. After a strenuous fight, he succeeded in carrying his resolution to the effect that the primary and intermediate examinations be discontinued, and that there be only a final examination on medicine, surgery, and obstetrics and diseases of women. The standard was fixed at 60 per cent., instead of 50 per cent., as heretofore.

FEES.

In an effort to reduce the fees paid by students, Dr. E. Ryan took the initiative. He contended that the cost of medical education was high, and that it was brains rather than money that was most required in the medical profession. He moved that the fee of \$100 be reduced to \$75. This was seconded by Dr. Spankie. After considerable discussion, the motion was lost, and the fee remains at \$100. Dr. Ryan contended that the abolition of the primary and intermediate examinations would save a large amount of money. Others held that the council had been going behind and that the fees could not be reduced. The vote was very close.

In the discussion, Dr. Hart, of Toronto, thought that the fees should be maintained, as the council required a building and a library. Dr. Ryan did not agree with this, and thought there was greater need for bright young men in the profession. Dr. Emmerson thought the fees should not be reduced at present.

Those who fail in future, must pay \$20 to write again, and \$25 on the second failure. The fee for registration as a matriculated student was fixed at \$25 instead of \$20, as formerly.

MATRICULATION.

The council decided to discontinue what is known as the medical matriculation. It was decided to accept a matriculation in Arts or any higher qualification. This materially simplifies the method of entry into the medical profession.

DURATION OF COURSE.

The length of course was fixed at five years, as in the past. Graduates in arts and science will be required to take only a four years' course. The student is still required to spend six months with a legally qualified practitioner, and six months attendance on clinics. Dr. G. R. Cruickshank moved that the form of affidavit of attendance in a doctor's office be changed so as to permit of the student taking a holiday. No change, however, was made. As the rule now is, a student cannot legally take a holiday in his fifth year, or rather he cannot legally procure a certificate for such attendance if he takes a holiday.

REDUCTION IN REPRESENTATION.

Dr. E. Ryan, of Kingston, raised this subject. He moved that the territorial representation be reduced to 9, the college to 3, and the homœopathic to 2. This would give a medical council of 14 as against the present one of 30 members. It was argued that this would save money, as the funds had been going back for some time.

Dr. E. E. King, Toronto, moved, and Dr. E. Ryan, Kingston, seconded a motion for the following committee to report on this, namely, Drs. E. E. King, E. Ryan, A. E. McColl, J. McCallum, E. A. P. Hardy, James McCarthy, and T. W. Vardon. This was carried.

Dr. McCarthy said that this matter had been up before, and he felt that something should be done with it. The present membership of the council consisting of 18 territorial, 8 college, and 5 homœopathic was too large.

It had often been pointed by various members that there were 5 homœopaths on the council as the representatives of some 60 practitioners in the province. It had also been often complained that of the 8 colleges having a representative on the college, only the university of Toronto, Queen's University, and the Western University were really maintaining a live medical faculty, teaching medicine and granting degrees in medicine. The University of Ottawa, Victoria University, the College of Physicians and Surgeons of Kingston, Trinity University, and Trinity Medical College had either never taught medicine or had ceased to do so.

At a later stage of the council's proceedings, Dr. Vardon suggested that the matter of reorganization be left over for a year. This called forth a vigorous protest from Dr. Cruickshank, who said that his constituents wished something done at once; and also reminded the council of the remark of Sir James Whitney, that if the medical council did not reorganize itself, he would wipe it out of existence.

Dr. Ryan explained that the members of the committee had been so busy with other council duties that they had not had time to consider the question of reorganization.

Later on the committee reported progress, and the matter was left in abeyance till next year. It is felt, however, the reorganization is

INFAMOUS AND DISGRACEFUL CONDUCT.

On this subject the council took a vigorous and active course. The names of Drs. W. Lehmann, and Edgar M. Cook, both formerly of Toronto, were dropped from the register. These cases came before the council, but they did not appear or put in any defence.

Dr. Thomas Flaherty was honorably acquitted by a unanimous vote, as there was no evidence to sustain any charge.

The case of Dr. W. Stinson, of Cobourg, was considered very fully. One vote decided by 11 to 10 to drop his name from the register. One further consideration his case was left over till next meeting of the council.

The cases of Drs. W. R. Cook and C. J. Parsons were considered, and their names restored to the register. Dr. Cook's case is a recent one, and was held over for consideration from last year's meeting. Dr. C. J. Parsons was dropped from the register thirteen years ago.

By vote of the council, the name of Dr. B. E. Hawke, of Toronto, was referred to the discipline committee for investigation and report.

UNIVERSITIES OF TRINITY AND VICTORIA DISQUALIFIED.

The college representation called forth considerable discussion. Mr. J. W. Curry, the solicitor for the medical council, gave it as his opinion that Drs. F. N. G. Starr, from Victoria University, and Dr. W. H. Pepler, from Trinity University, could not take their seats in the council, as they were teachers in another university. By a majority vote they were called upon to retire. By a vote of 20 to 9 these universities were allowed a representative if this act was properly complied with, and not send a teacher of another college. Provost Macklem, of Trinity, wrote complaining of this action, but was referred to the section in this act that disqualified Drs. Starr and Pepler.

The case of the other colleges in question was left over until the legislature had amended the act so as to remove all doubt, as to their right to representation. These are the University of Ottawa, Trinity Medical College, and the College of Physicians and Surgeons of Kingston.

REPORT ON EXAMINATIONS.

Dr. Lane submitted the report of the Board of Examiners as follows:

Fall of 1910: Primary, 25 tried, 15 passed, 10 failed; intermediate, 64 tried, 41 passed, 28 failed; final, 63 tried, 39 passed, 26 failed; total, 154 tried, 95 passed, 50 failed.

Spring, 1911: Primary, 93 tried, 57 passed, 36 failed; intermediate, 195 tried, 86 passed, 109 failed; final, 148 tried, 127 passed, 21 failed; total, 436 tried, 270 passed, 166 failed.

One examiner caused 80 failures.

This report caused a lengthy discussion. Dr. Said said that a majority of the failures were in applied anatomy.

Dr. E. Ryan thought that was very strange that a certain student might have a good margin on his final examination and fail on the intermediate. He thought that if a student did well on his university examinations, he should not be set back because one or two of the council examiners have certain opinions about some of the subjects. He contended that a full statement of the results with the numbers who failed on each subject should be submitted. Either the teaching or the examining was at fault.

Sir James Grant held that the council should abandon the primary and intermediate examinations.

Dr. Cruickshank said that one of the reasons was that the universities set scientific examinations and the council examiners sought for practical knowledge.

Drs. Hart and McColl thought that the universities taught too much theory, and were not practical enough in their work. It was not right that the student be taught the utmost detail on complicated operations, and could not do ordinary ones. Dr. Hart contended that the colleges were neglecting their duty when they did not teach the students physical therapeutics, and enable them to meet such opposition as came from the osteopaths. He also said the colleges did not hold an eight months' session as required.

PHYSICAL CENSUS.

"Whereas, the question of the medical inspection of schools and scholars is now prominently before the peoples of various nations; and

"Whereas, the Legislature of Ontario in 1907 authorized trustees, to provide and pay for the dental and medical inspection of pupils, as the regulations may prescribe, or, in the absence of regulations, as the board may deem proper."

With very little discussion, the following resolution, moved by Dr. Sparkie, was passed unanimously:—

"That this council, in the interests of school children, respectfully recommend to the Minister of Education the advisability of taking a physical census of the school children with the view of comparing the

health and physical condition of children in urban and rural districts, and in the meantime further respectfully recommend the training, as in England, of the students in our Model schools, Normal schools and faculties of education in such a knowledge of school hygiene as will enable them to recognize common defects and diseases of children.

"This council further recognizes that, while the employment of school doctors and nurses, giving all their time to medical inspection, would be the ideal plan for every municipality in the province, yet it is of the opinion that the public are not sufficiently familiar with the benefits of medical inspection to be ready to meet the very considerable expense involved in inaugurating such a comprehensive system at the present time."

In support of this resolution, Dr. Spankie said:—

"It is the object of government and civilization to make each generation better, physically, mentally, and morally. We are particularly interested in the physical problem. It is within our scope to see that school children are kept in a healthy environment. Two thousand years ago, Plato called medicine the science of health. To-day we are too fond of calling it the science of disease. We should pay more attention to prevention. In every school there is a percentage of the pupils who have defects which could be cured. This is a problem of the nation. Medical inspection of schools and scholars is absolutely necessary. It is a maxim accepted by all that children inherit a right to education. They also inherit a right to health. Every child in this province should be a healthy, clean, wholesome animal. That is the basis of all success."

"Many European nations," said Sir James Grant, "have become convinced that greater attention must be given to children in the schools to be able to detect early cases of tuberculosis. Right here in Toronto, there was a young lady who had won many prizes, but who shortly after died of tuberculosis. How do we know that she did not transmit the disease to other pupils?"

"I trust the day is not far distant when the Government will make it absolutely compulsory that every child should be examined."

Dr. T. W. Vardon said that if adults wish to kill themselves that is their own affair, but children ought to be protected against impure water and unsanitary conditions as far as possible.

APPEALS.

Dr. Klotz presented the report of the Complaints Committee, by which 92 were passed of those who failed in the spring examination. He said that there had been difficulty this year in trying to do justice to students. The trouble was in the surgery paper, where the examiner

was a very close marker. A large number failed, but many appeals have been granted. "We feel that we are not jeopardizing the public in being a little generous in this matter."

As the council decided to discontinue primary and intermediate examinations, all those who passed their final subjects, but failed on the intermediate papers will be granted their licenses. The following appeals were allowed:—

Gordon E. Booth (in pathology, but not in surgery), G. W. D. Carleton, Wm. M. Cody, G. G. Copeland, A. S. Duncan, W. Ewart Ferguson, W. G. Fraser, C. W. Graham, C. G. Gunn (in primary, but not in intermediate), C. D. Hamilton, G. B. Kendrick, Ambrose L. Lockwood, B. N. MacCaulay, Kenneth H. MacLean, Arthur McAllister, J. E. Montgomery, B. C. Reynolds, A. C. McGlennon, S. W. H. Nelson, A. G. Poole, Gordon Priestman, G. O. Scott, Clarence Young, Arthur D. Sinclair, W. R. Tutt, R. L. Wickware (in pathology, but not in finals), W. L. Whittmore, J. P. Wilson, G. L. Williamson, H. M. Yealland, Thomas W. Nanckville (in intermediate surgery, but not in finals), A. W. Thompson (in intermediate surgery, but not in anatomy), R. W. Clark, L. J. Corrigan, J. E. Hagmeter, C. F. Dorsey, Frank J. Thompson, William C. Campbell, W. A. Burgess (in intermediate, but not in finals), W. A. Marshall (surgery and sanitary science, but not in medicine), S. M. Smith, E. B. Balfour, R. Blanchard, Howard E. Thompson (in surgery, but not in obstetrics).

All those who failed in the intermediate and pass in the final examinations were passed also.

THE EXAMINERS AND THEIR FEES.

The following examiners were appointed:—

Fall examinations, 1911: Dr. A. S. Lockhart, Harrowsmith, clinical medicine; Dr. F. J. Burrows, Seaforth, clinical medicine; Dr. J. D. Balfour, London, diseases of women and clinical; Dr. A. F. Tufford, St. Thomas, clinical surgery; Dr. P. Stuart, Guelph, clinical surgery.

Spring, 1912: Surgery, Dr. J. D. Balfour and Dr. P. Stuart, Guelph, medicine; Dr. W. T. Cornell, Kingston, and Dr. A. S. Lockhart, Harrowsmith, midwifery and diseases of women; Dr. R. H. Arthur, Sudbury, Dr. W. Goldie, Toronto, Homœopathy; Dr. J. M. Stearns and Dr. G. L. Husband, Hamilton.

They will receive \$15 a day for oral examinations, and five cents a mile for railway expenses.

RECIPROCITY.

Dr. McColl, seconded by Dr. Griffin, moved an amendment to a clause in the section of the regulations dealing with interprovincial

reciprocity in medical registration. He contended that it permitted graduates in Nova Scotia to enter practice in Ontario under unfair advantage. Dr. Spankie challenged him to cite a single instance of the grievance complained of. Mr. McColl replied that he knew of three, but Dr. Spankie declared he was mistaken. The amendment lost on a vote of 7-11.

COMMITTEES.

The Council appointed the following committees:—

Registration—Drs. McColl, Cruickshank, Wickens, Ferguson and Lane.

Finance—Drs. J. McCallum, Bascom, Emmerson and Merritt.

Printing—Drs. Hart, McCallum, King, Young and Hardy.

Education—Drs. MacArthur, Klotz, Griffin, Ferguson, King, McColl, J. McCallum, Spankie and Jarvis.

Property—Drs. Johnson, Routledge, Vardon, Griffin and Bascom.

Complaints—Drs. Klotz, Adams, Stewart, Wilford and Johnson.

ADDRESS TO GOVERNOR-GENERAL.

Sir James Grant and Dr. Klotz were instructed to draw up an address of welcome to be presented to the Duke of Connaught when he arrives.

VOTE OF THANKS.

A cordial vote of thanks was tendered Dr. Gibson, the retiring president, and Dr. Bray, the registrar, for their efficient services.

NEXT EXAMINATION.

The dates for the examinations will be as follows:—

Fall examinations, Toronto, first Tuesday in November in final subjects only.

Spring examinations, in Toronto, Kingston, and London, on the last Tuesday in May.

REGULATIONS OF THE PROVINCIAL BOARD OF HEALTH OF ONTARIO.

1. No garbage, excreta, manure, vegetable or animal matter or filth shall be deposited on or in any of the lakes, rivers, streams, or other inland waters of the Province of Ontario.

2. Residents of health resorts and summer resorts are hereby required to so dispose of their garbage, excreta, manure, vegetable or animal matter or filth that such shall not create a nuisance or gain

entrance to or pollute any lake, river, stream or other inland water of the province.

3. The owners and officers of boats and other vessels plying upon any lake, river, stream, or other inland water of the province are hereby required to so dispose of the garbage, excreta, manure, vegetable, or animal matter or filth upon such boats or vessels that such shall not create a nuisance or gain entrance to or pollute such inland waters.

4. Hotels, restaurants, railway trains and depots, boats, and all other public places which provide a supply of drinking water for the use of the public must safeguard its purity.

THE COST OF LUNACY.

To the Editor of the Canada Lancet:

SIR,—Will you kindly grant me a little of your valuable space in which to ventilate the following?

Mr. Burns, in answering Mr. Pikes Pease in the House, on the 25th May last, said: "The expenditure on lunatics in England and Wales for twenty-five years ended March, 1909, was £71,500,000." These figures, it will be seen, do not relate to Scotland or Ireland.

Surely, Sir, this discloses a terrible state of things in the nation? It would seem by a letter addressed by the Medico-Psychological Association of Great Britain and Ireland to the Lunacy Commissioners (vide page 68 of the 64th annual report of the Commissioners, year 1910) that medical men in general are almost destitute of any knowledge of Psychological Medicine: that "there is in the country no adequate systematic instruction in Psychiatry. The evils of this neglect become year by year more and more manifest." On the 1st of January, 1910, there were 130,553 certified lunatics (vide page one, same report). Of these the pauper patients numbered 118,901. The causes of insanity are many, but largely preventable, like many physical diseases.

The question is, do medical men understand "lunacy" as they should? It would appear by the letter quoted above, and from the fact the term "lunacy" is entirely lacking in a scientific basis, seeing the word has no reference whatever to the sad subject of mental disorders, *they do not!* The following is the amusing etymology of the word: "Lunatic. Fr. *lunatique*, from Lat. *lunaticus*—affected by the moon, which was supposed to cause insanity; *insane* from *lunatus*—moonlike . . ." The Encyclopædic Dictionary.

"Lunatics. Moon-struck people. The Romans believed that the mind was affected by the moon and that 'lunatics' were more and more

frenzied as the moon increased to its full."—Dictionary of Phrase and Gable.

"The various mental derangements . . . which have been attributed to the influence of the moon have to this day given the name 'lunatics' to persons suffering from serious mental disorders."—Crozier. "Popular Errors," Chap. IV., p. 53.

Seeing the enormous cost of "lunacy" and that it is increasing by some 2,000 persons annually, is it not time, Sir, that at least the doctors, especially the Medical Department of the L.G.B., coined a word, with a scientific basis, describing mental disorders?

It is not comforting, from the letter quoted above, to find, by the "lunacy" Acts, only two ordinarily qualified medical men required to consign any unfortunate person to *any* "lunatic" asylum: and that, by the consent (illegal) of the L.G.B., only *one* is required to sign the certificate of pauper "lunatics." As to this practice, see pp. 63 to 67 of the 59th annual report of the "Lunacy" Commissioners. Should not M.P.'s on both sides of the House look into the subject without any further delay.—Yours truly,

H. R. GAWEN GOGAY.

P.S.—As the Medical profession seem unwilling or unable to coin a term, with a scientific basis, may I suggest "mensitis?" Thus, we should get the term mensitis instead of the meaningless and grotesque word "lunacy"; the Mensitis Commissioners, instead of "Lunacy" Commissioners; mensitic instead of "lunatic," and Mensitic Asylum instead of "Lunatic" Asylum. The term mensitis is, of course, derived from the Latin *mens*, the mind, etc., and the Latin and Greek, *itis*, inflammation, and assuredly does describe a disordered or diseased state of the mind. It would be interesting to know from the Local Government Board in what degree the mind (brain) is affected by the moon (luna) in any of its phases, or how it influences any kind of mental disorder? H.R.G.G.

20 Queen's-road, Wimbledon, London, S.W.

July, 1911.

DIAZO REACTION.

In the *Medical Record*, April 1st, Levinson calls attention to the possibility of error in the test for the diazo reaction due to the ingestion by the patient of pheno-phthalein, so commonly used now as therapeutic agent. To differentiate it is necessary to remember that addition of alkalis to the urine will cause the appearance of a red color in the presence of the drug, a false diazo; to find if there is a true diazo it

becomes necessary to add a few drops of acid when the color, if due merely to the drug, will fade, but not so if it be a real diazo.

NEW RADIUM INSTITUTE.

Queen Alexandra, with the Empress Marie, of Russia, paid a surprise visit to the new Radium Institute in Ridinghouse Street, W., on July 10th.

The royal party was received by Sir Frederick Treves, chairman of the committee. Mr. Sydney Holland was also present. The party was conducted through the institute by Sir Frederick Treves, and demonstrations were given of the effect of radium on various bacteria and organisms by the medical superintendent, Mr. Hayward Pinch, and the director of the chemical laboratory, Mr. W. L. Alton.

An inspection was first made of the consulting rooms, which are equipped with all instruments for diagnosis and cubicles in which the treatment is applied. The royal visitors were then taken over the pathological laboratory where the effects of radium on bacteria were demonstrated and some new forms of microtomes—instruments for cutting microscopical sections—were shown. The chemical laboratory, the photographic studio, and the dark room were also visited.

Their Majesties were deeply interested in all they saw and frequently expressed the pleasure the experiments gave them.

DRY AREAS AND THE SALE OF LIQUOR.

The citizens of the State of Maine are preparing once more to vote on the question of prohibition. As the *New York Sun* puts it, the whole commonwealth is more or less "het up" on the subject, while the prohibitionists throughout the United States and Europe are sending in monster petitions asking their compatriots to stick to their colors. As these petitioners do not have to live in Maine themselves, most of them probably have little personal knowledge concerning the fact that Maine's prohibition never has prohibited, but has on the other hand filled that country and its citizens with a lot of cheap, poisonous deadly concoctions that pass for things other than what they are.

In Canada it is noticeable that while the "dry" territory is extending itself gradually, the consumption of liquor goes on apace. The annual report of the Inland Revenue Department for the fiscal year, ending

March 31, 1911, shows that as compared with the previous year there has been a large increase in the per capita consumption of spirits, wines and malt liquors. The totals for the last three years are as follows:

	Total gallons per head of population
1909	6,239
1910	6,188
1911	6,397

According to the ardent temperance advocates there are several reasons for this increase, and they see nothing in it to discourage them.

CANADIAN NATIONAL EXHIBITION.

Permanent pavements on all the principal streets of the Exhibition Park are a guarantee that there will be no mud at the Canadian National Exhibition this year.

An exact reproduction of the Coronation Procession at London is the ambitious undertaking of the Canadian National Exhibition.

Over 20,000 lights are what the Hydro-Electric are installing for exterior decorations and lighting the grounds at the Canadian National Exhibition.

The Coldstreams Guards Band, musicians of the Royal Household, are crossing the ocean to fill a two weeks' engagement at the Canadian National Exhibition.

It is Coronation Year at the Canadian National Exhibition, and the attractions are largely of a coronation nature, including the Coronation Procession, Festival of Empire, His Majesty's household band, a replica of the crown jewels and coronation fireworks.

The attendance at the Canadian National Exhibition is jumping up at the rate of 100,000 a year. In 1908 it was 650,000; in 1909 it was 752,000; in 1910 it was 837,000. This year it should exceed the million mark.

Every province in the Dominion will have a composite exhibit of its resources at the Canadian National Exhibition this year.

The Art Loan Exhibit at the Canadian National Exhibition this year will be made up of pictures of the year from European galleries and a

selection from the private collections of Canadian and American millionaires.

The model of the Titanic, the largest ship afloat, will be on exhibition at the Canadian National this year.

The lantern drill at the Canadian National Exhibition this year will be a spectacular novelty. Just imagine 500 men with lanterns making fantastic figures in the darkness and you will have some idea of what it is like.

IMPERIAL CANCER RESEARCH FUND.

Proceedings at the Tenth Meeting of the General Committee held at the Royal College of Surgeons, on Thursday, the 20th July, 1911.

The Annual Meeting of the General Committee was held at the Royal College of Surgeons, Lincoln's Inn Fields, on Thursday, the 20th July, 1911, the Duke of Bedford, K.G. (President), in the chair.

Among those present were:—Sir William Church, Bart., K.C.B., Sir Thomas Barlow, Bart., K.C.V.O., Sir Henry Butlin, Bart., Sir Henry Morris, Bart., Mrs. Bischoffsheim, Mr. Henry L. Florence, Sir John McFadyean, Dr. Sidney Martin, F.R.S., Mr. Edmund Owen, Sir R. Douglas Powell, Bart., K.C.V.O., Sir Francis Lovell, C.M.G., Sir John Tweedy, Sir Henry G. Howse, Lady Meiklejohn, Dr. F. W. Andrewes, Mr. R. Clement Lucas, Mr. S. Forrest Cowell, Dr. T. H. Craig Stevenson, Dr. Tomson, Miss D. S. Coode, Dr. J. A. Murray, Dr. W. H. Woglom, Dr. E. F. Bashford (General Superintendent), and Mr. F. G. Hallett (Secretary).

The Secretary read the minutes of the last meeting, which were confirmed, and announced that letters expressing the regret of the writers at their inability to attend had been received from Lord Lister, Lord Strathcona, Sir Julius Wernher, Mr. A. J. Balfour, M.P., Mr. W. Waldorf Astor (Vice-Presidents), Mr. Ludwig Neumann, Mr. J. Ashley Mullens, Dr. T. T. Whipham (Trustees), and others.

The president then called upon Sir William Church to move the adoption of the report.

Sir William Church said: My Lord, ladies and gentlemen, in moving "That the Ninth Annual Report of the Imperial Cancer Research Fund be approved and adopted," I presume that it will not be your wish that I should read the report at length. I have this year, as in former years, made a summary of the principal contents of the report, and per-

haps I might be allowed to give you the summary, rather than read the whole of the report.

The work carried on in our laboratory during the past year has for the most part been a continuance of that recorded in the Eighth Annual Report, and has included the repetition of a portion of the experimental work previously described for the purpose of supplementing and checking the accuracy of the results then obtained and the conclusions drawn from them. During the year the experimental investigation of cancer has been extended to rabbits; a mammary carcinoma and sarcoma of the subcutaneous tissues propagable by implantation having been met with.

The fourth scientific report is now in preparation, and will be shortly published; its preparation has necessarily occupied much of the time of our staff. The report is restricted to three papers bearing directly on the nature, and indirectly on the genesis, of cancer. The relationship that malignant new growths bear to the animal in which they occur is shown to be an individual one; the influence of heredity has been studied; and the cellular changes bridging over the differences between normal and cancerous cells have been demonstrated in growths under continuous observation and examination and under natural conditions. The advances thus made in our knowledge of cancer indicate the direction in which further investigations can be profitably undertaken.

At the commencement of our statistical investigation, Dr. Tatham, Medical Superintendent of Statistics in the Registrar-General's Office, made arrangements for obtaining detailed information as to the incidence of cancer in different parts of the body and the frequency of its occurrence in particular sites at different ages; the returns recently published by Dr. Stevenson support the views held by Dr. Bashford as the result of experimentation on mice. The incidence of cancer does not in man increase in all organs and in all parts of the body with increased age. An analysis of the deaths from cancer for the years 1901-1909 shows that for males the main increase is due to cancer of the alimentary canal, especially of the stomach, the liver and gall bladder. The skin shows but slight or no increase. For females the increase also falls mainly on the intestinal tract and to a less extent on the mamma, the uterus, liver and gall bladder, whilst the skin shows no increase.

The study of cancer in man and in domesticated animals in widely separated portions of the globe has shown that the practice of peculiar customs, causing chronic irritation to particular parts of the body, is associated with the disease in situations from which it is absent where those customs do not obtain. Hence it was very desirable that accurate information should be obtainable as to the incidence of cancer in persons pursuing different occupations. The question was discussed with Dr.

Tatham in 1903 and 1904, and subsequently with Dr. Stevenson, who informs us that the new arrangements made for the tabulation of deaths will enable the Registrar-General's Office to supply this information.

Breeding experiments to test the presence or absence of heredity in cancer have been carried out for six years, but it is only now that we have sufficient numbers to enable any conclusion to be drawn from them. The tables in the annual report show that heredity plays a part in mice in producing mammary cancer, the progeny of cancerous ancestry affording a higher percentage of cancer of the mamma and also of cancer in other organs, than the descendants of those whose mothers and grandmothers had not suffered from the disease. While it is as yet unknown on what cause this liability to tumor-growth depends, it appears improbable that a general constitutional predisposition to proliferative cell-growth can be the cause, as implanted cancer does not grow more readily or with greater luxuriance in mice of a cancerous stock than in others. The transplantation of a portion of the tumor in a spontaneously affected mouse into another site in the same mouse is almost invariably successful, whilst on the other hand the implantation of a portion of a spontaneous tumor into another spontaneously affected mouse is almost as invariably unsuccessful. This appears to demonstrate that every tumor is peculiarly and genetically related to the animal in which it arises. The genesis and growth of cancer are distinct phenomena which can and must be separately investigated. The study of propagated cancer is but an investigation into its growth under artificial conditions, and has only an indirect bearing on its genesis or origin. The cultivation of cancerous tissue has, as has been always maintained by Dr. Bashford, an important if indirect bearing on the genesis of cancer. He has succeeded in continuously cultivating 35 different tumors for over three years, and 50 other distinct tumors have been continuously propagated for lengthened periods. Observation shows that there is a constancy as well as variability in the growths derived from individual tumors. The variations which occur in any given strain of tumors are similar to those which distinguish one strain from another. The occurrence of these variations in cultivated growths thus artificially maintained, justifies the inference that similar variations may occur under natural conditions, and affords evidence that the cancer-cell is a modification of a normal cell. Numerous experiments have been made in continuance of the work hitherto done in immunity. The distinctions and similarities in the immunizing power of different tumors has been extensively studied. It has been found possible to produce multiple cancer-tumors resembling what we find in the dissemination of cancer, by injecting cancer-cells into the blood stream, and what is more important, to prevent this taking place by means fully described in

former reports. Methods which prevent the successful implantation of cancer have been tested on 33 mice affected with spontaneous cancer and have given no evidence of possessing power either to hinder the growth and dissemination of the disease or to prevent the recurrence of spontaneous cancer after the removal of the primary tumor.

Other investigators have described methods by which immunity against propagated cancer has been obtained by vaccines and sera; some of these methods have been tried in our laboratory, but not as yet with successful results.

Finally, a considerable number of spontaneous cancer tumors in mice have been observed to undergo spontaneous cure and disappear, an event which is occasionally, though rarely observed in man. (Applause).

Sir Henry Morris: Sir, in seconding the report, or rather the three reports which are before you, I am sorry to say that I think I ought to sound a note of warning. The Treasurer's report states what seems to be a very satisfactory thing, namely, that this year the expenditure has exceeded the income from the invested funds by a less amount than in any previous year, excepting the year 1903 when the work was first begun. Those who look at page 17 of the statement will see that the expenditure has exceeded the income this year by £893, whereas in some other years the expenditure has exceeded the income by as much as £2,000. But you must not conclude that we are now arriving at the time when our income is likely to meet our expenditure, because during last year we have had no unusual expenses. We have not had an expensive scientific report to produce, but the statement next year will show that a very large amount has been expended on the scientific report which is now actually in the Press. Another thing I should like to mention in this regard is that nine years ago, when this Fund started, this was really the only body that was investigating the causation, prevention and treatment of cancer. There were, of course, hospitals giving special provision for the treatment of cancer, but there was only one institution in which the investigation of cancer was being proceeded with. In those nine years a considerable number of bodies and laboratories have been created, not only in this country, but also in the United States, in Canada, and in various countries in Europe. Now, that may seem to imply that the work of the Imperial Cancer Research Fund is not so needful as it was at the time it was started, but that really is far from being the case. I think it only right to say that in the establishment of the greater number of these other focusses of investigation, the Imperial Cancer Research Fund has rendered very material assistance, not only by providing material, but in other ways. Then the value of the work of this Imperial Fund is shown in other respects. It is shown by the number of distinguished men who come from

various parts of Europe, America, Japan, Australia, and elsewhere, to study the methods of research which are in progress in our laboratory and to carry on work which is suggested. Perhaps they may bring suggestions of their own. At any rate, their chief object is to see the work which is taking place in what they consider is *par excellence* the leading place for cancer research. Another thing pointing in the same direction is the fact that our Director is so frequently and so widely called upon, not only to render help to those who come from other places to study in the laboratory on the Embankment, but also to give addresses and to explain the progress of the work which is proceeding in the laboratory. I have just jotted down a list of the places where Dr. Bashford has accepted invitations to address scientific bodies. He has been in Paris, Berlin, Heidelberg, Toronto, Christiania, Utrecht, Belfast, Birmingham, Budapest and elsewhere. I think when you realize the fact that the head of the investigation department in our laboratory is called upon by the leading scientific minds of so many important centres to address them and explain the progress of the work which is being done here in London, you will regard it as a source of gratification to us as citizens of the Empire in which the work is established and is being so successfully carried on. There is one other thing which I should like to mention, because I think it is only right to do so, and that is what is called the Walker Prize. It is a quinquennial prize which, it is true, is left in the hands of the Council of the College of Surgeons, but this Council appoints a committee, which is not composed necessarily or essentially or, indeed, always of members of the Council. There may be one or more members of the Council on it, but outside individuals are appointed on this committee to report to the Council upon the work which has been done during the preceding five years. That committee, assisted by the advice of scientists in all the great capitals, towns, and working centres of Europe and America, recommends the Council of the College to give this Walker Prize to the individual who has done the best work in connection with the causation or treatment of cancer during the last five years. It is the third time that this prize has been awarded, and I am glad to say that the unanimous opinion of the committee, aided by the various sources of information that I have mentioned, was that Dr. Bashford was unquestionably the individual who ought to receive the Walker Prize. (Applause.) I should like to point out that, in spite of the starting of so many other institutions elsewhere, greater responsibility is thrown upon the gentlemen in our laboratory than at first sight may appear. Not only must the ordinary work go on, not only must the work be continued for the purpose of assisting these other centres, but in order to maintain the great reputation of the Imperial Cancer Research Fund we must have the leading and most accomplished

men in the laboratory working at other things than the fresh investigation to which much of their time has been devoted, and that being the case I anticipate that we shall have to review the remuneration which we are giving to our scientific workers, for we find now that there is a demand made upon those who have been trained in our laboratory to go and take larger salaries elsewhere. When we remember, further, that this Imperial Cancer Research Fund, owing to the peculiar advantages of the country and its large connections in the Colonies, is in a position to obtain information and to carry on researches in a way that none of the other centres can do, either in England, Scotland, the Continental capitals, the United States, or Canada, then I think it will appeal to you that we must do all we can to keep these workers free to carry on that co-ordinating and high class work which all the world is looking for to be continued in the laboratory on the Embankment. I beg to second the motion. (Applause.)

The resolution was carried unanimously.

The President: The gentlemen to whom I propose a vote of thanks are mainly representatives of various scientific bodies, who have generously given their time and skill to the consideration of the problems which Dr. Bashford and his staff are constantly bringing before them, exercising scrupulous care to prevent the appearance of any unguarded statement which might unduly depress or raise the hopes of the public. There are also others to whom our thanks are due. I will only mention one name, that of Dr. Stevenson, of the Registrar-General's office. Through his cordial co-operation with our staff, the distribution of cancer throughout the country is daily becoming more precisely known, and profitable lines of investigation are indicated by the differentiation of the various groups of the disease which affect different parts of the body in different ways. Ever since the Fund was started the work has been conducted in the laboratories in the present building, which we have occupied free of rent, rates, taxes, and cost of lighting and heating. Next year we shall move to the new laboratories now being erected by the Royal Colleges of Physicians and Surgeons over their new Examination Hall. To these laboratories the Executive Committee have agreed to contribute in the form either of a premium or of an annual rent. Our expenses will therefore be increased. On the other hand, the improved accommodation, the up-to-date planning, and the elaborate equipment of the new laboratories will greatly increase the efficiency of our investigations. It is hoped that additional public support will enable us to meet the additional expenditure without drawing on the capital funds of the Trust. Once more we have to ask our supporters to exercise the virtue of patience. Progress has been and is being made; but scientific work of every kind, and especi-

ally work devoted to so obscure and difficult a problem, requires years of minute study and large expenditure before definite results can be obtained. Let us, meanwhile, remember the grim nature of the malady which is being investigated; let us remember how great an addition to the sum total of human happiness, and how great a reduction in the sum total of human misery would be effected by the conquest of cancer; let us determine, in the name of our common humanity, that we will, each of us according to our different powers of helping the work, prosecute the research on which we have embarked with hopeful vigor and unflagging energy. (Applause.) I move the resolution which stands in my name—"That the thanks of this meeting be given to the Chairman and members of the Executive Committee, the Sub-Committees, the Honorary Treasurer, and others who have assisted in the work of the Fund during the past year."

Sir Richard Douglas Powell: My Lord, ladies and gentlemen, I have great pleasure in seconding this resolution. Having had some experience of the work of this Committee, I know very well how very carefully every detail is gone into by it. The Chairman, Sir William Church, as we all know, has made a thorough study of the problem of cancer, and I am sure it will add to the confidence of subscribers to reflect that all the members of the Committee are men who are consulting physicians and surgeons, as well as leading members amongst the health officers of the kingdom, and also that veterinary medicine is ably represented on the Committee. Then, with regard to the Statistical, Pathological and Publication Sub-Committees—very important bodies indeed—these Sub-Committees consist of gentlemen who, each in the particular department dealt with, whether statistics, pathology or publication, have a European reputation in those departments. I need say nothing more, after the remarks which have fallen from our Honorary Treasurer, with respect to our Director. We all know the great value of the work which he has done. I would like to mention also Dr. Murray and Dr. Haaland, who have devoted a great deal of attention and labor to getting together the records of this Cancer Research. Last of all, but by no means least, I must refer to our Honorary Treasurer, who is indefatigable not only in collecting funds, but in supervising the distribution of funds. The eloquent observations of Sir Henry Morris with regard to the necessity of increased funds will, I am sure, appeal to everyone. I must confess I never feel that great hesitation in dipping a little into the capital that our learned Treasurer so strongly depreciates. I feel myself that if capital accumulates to a sufficient degree it may come within the category of a hen-roost, and that is not, perhaps, fortunate for the Fund. With those remarks I beg to second the resolution.

The resolution was passed unanimously.

Sir Henry Butlin: Your Grace, I move "That the nomination of Sir William Church, Bart., K.C.B., for re-election by the Royal College of Physicians and of Surgeons as a member of the Executive Committee be approved." This is a mere formal resolution, but it gives me the opportunity of saying how much this Imperial Cancer Research Fund is indebted to Sir William Church. I have been on the Executive Committee from the foundation of the Fund, and Sir William Church has been in the Chair during all that time. We are indebted to him in every possible way. He knows all the business of the research; he is excellent at finance; he is excellent at all kinds of things outside; he knows how to deal with the various bodies and people with whom we come in contact, and in fact he is of the utmost value to us. (Applause.)

Sir John McFadyean: My Lord, I have very great pleasure in seconding the motion, and in associating myself fully with what Sir Henry Butlin has said as to the enormous value of Sir William Church's wise influence in promoting the objects for which the Imperial Cancer Research Fund was founded. (Applause.)

The resolution was carried unanimously.

Sir Thomas Barlow: Ladies and gentlemen, I am sure you will all agree that the resolution which I have the honor to propose is not a mere formal one. There is an enormous amount of work done in connection with this Imperial Cancer Research Fund—work done by the Director and his able staff of assistants, by the Secretary, and by the Chairman of the Committee, who have very important affairs to attend to. But we could not really secure the confidence of the public if we had not the continued help of men of position like the Duke of Bedford. It is no light thing to have someone in his position to exhort people to take the right line—the enlightened line—that they must not expect sensational results but that every little bit of knowledge that they have got, however minute it may seem to be, is almost, so to speak, wrested from the great enemy we are fighting. We do feel more grateful than we can express to the Duke of Bedford for giving his strong help and countenance to this important undertaking. I beg, therefore, to propose—"That a cordial vote of thanks be accorded to His Grace the Duke of Bedford, K.G., for presiding at this meeting." (Applause.)

Sir John Tweedy: I beg to second the motion just made by Sir Thomas Barlow, and would like to associate myself with every word that he has said. There is in the minds of the outside public an absurd notion that this is a doctor's question. It is not a doctor's question in the least, but the public have got the impression that somehow research is something carried on for the benefit of doctors. Logically nothing could be

more disastrous to the doctors themselves than the progress of preventive medicine, but we have to face that difficulty, and it is a matter of great importance that men of enlightened public spirit like His Grace should come to such a meeting as this, not only to appeal for funds, but to give the countenance of his position and of his knowledge and experience of affairs to a large national question which concerns the benefit of the whole community—doctors not less than any other member of the community. Our progress, of course, must necessarily be slow. All scientific progress is slow, but the methods which are now being pursued are, I am quite sure, certain, and sooner or later we shall be within reach of our goal. I do not mean to say that I think the cause of cancer or any secret of its cure is already within the reach of scientific investigation, but we are very nearly ascertaining the conditions under which cancer occurs. That has been obtained by research, and it is in the encouragement of research that the presence of such men as his Grace does so much to steady public opinion. I have very much pleasure in seconding the motion proposed by Sir Thomas Barlow. (Applause.)

The motion was passed with acclamation.

The President: Ladies and gentlemen, I am very much obliged to Sir Thomas Barlow and to Sir John Tweedy for the kind terms in which they have proposed this vote, and to you for the kind reception you have given to it. I can only assure you that if I can be of assistance at all in any capacity whatever to the Imperial Cancer Research Fund it will be a source of sincere satisfaction to myself to render that assistance. (Applause.)

The proceedings then terminated.

MEDICAL PREPARATIONS, ETC.

PROMPT RELIEF IN SCIATIC PAIN.

In reporting his experience in the treatment of sciatica, Fred. E. Davis, M.D., writes as follows in *Annals of Gynaecology*: "I have been giving antikamnia and codeine tablets a thorough trial in the treatment of sciatica, and I must say that my success has been phenomenal indeed. I have also induced two other physicians to give them a trial, and their success equals or surpasses my own. I meet with many cases of sciatica, and before adopting antikamnia and codeine tablets I used a great deal of opium and morphine to relieve the pain. Since then, I have not given either. One of my patients had been confined to bed for three weeks dur-

ing her last attack of sciatica. I prescribed one antikamnia and codeine tablet every four hours and in forty-eight hours she was up and about, and has not felt the pain since."

A GOOD BISMUTH PREPARATION.

After an exhaustive study of the chemical and physical properties of bismuth and its compounds, the chemical experts of Parke, Davis & Co. two or three years ago succeeded in perfecting what many physicians consider the most eligible preparation of the kind—Milk of Bismuth, P.D. & Co., a mixture containing the hydrated oxide of bismuth in suspension. The product is stable under all ordinary conditions of temperature and exposure to light and air.

The advantage which Milk of Bismuth, P., D. & Co., possesses over other compounds of the metal is the state of fine subdivision in which the hydrated oxide is presented. This insures its more thorough distribution over the mucous surface of the alimentary canal, upon which it exerts a peculiarly beneficial effect. Its action is not only astringent, but, as some writers have observed, it appears to have a specific effect upon certain lesions, as ulcers, causing them to heal. It is also an antacid and protective, and undoubtedly is mildly antiseptic. Each fluid drachm of Milk of Bismuth, P., D. & Co., represents the bismuth equivalent to five grains of the subnitrate.

PASTE FOR ULCUS CRURIS VARICOSUM.

Wehner gives the following paste for *ulcus cruris varicosum* (*Deutsche medizinische Wochenschrift*, 1911, No. 23):

- R Zinc oxide,
 Starch,aa 30.0 grammes;
 Glycerin,
 Water,
 Wool fat,
 Simple cerate,aa ad 100 grammes

M.

—*New York Medical Journal.*
