

## Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

- Coloured covers /  
Couverture de couleur
- Covers damaged /  
Couverture endommagée
- Covers restored and/or laminated /  
Couverture restaurée et/ou pelliculée
- Cover title missing /  
Le titre de couverture manque
- Coloured maps /  
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black) /  
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations /  
Planches et/ou illustrations en couleur
- Bound with other material /  
Relié avec d'autres documents
- Only edition available /  
Seule édition disponible
- Tight binding may cause shadows or distortion  
along interior margin / La reliure serrée peut  
causer de l'ombre ou de la distorsion le long de la  
marge intérieure.
  
- Additional comments /  
Commentaires supplémentaires:

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- Coloured pages / Pages de couleur
- Pages damaged / Pages endommagées
- Pages restored and/or laminated /  
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/  
Pages décolorées, tachetées ou piquées
- Pages detached / Pages détachées
- Showthrough / Transparence
- Quality of print varies /  
Qualité inégale de l'impression
  
- Includes supplementary materials /  
Comprend du matériel supplémentaire
  
- Blank leaves added during restorations may  
appear within the text. Whenever possible, these  
have been omitted from scanning / Il se peut que  
certaines pages blanches ajoutées lors d'une  
restauration apparaissent dans le texte, mais,  
lorsque cela était possible, ces pages n'ont pas  
été numérisées.

# THE CANADIAN PRACTITIONER AND REVIEW.

EDITORS :

ADAM H. WRIGHT, B.A., M.D.

W. H. B. AIKINS, M.D.

EDMUND E. KING, M.D.

## VOL. XXIV.

January to December, 1899

TORONTO:  
THE CANADIAN PRACTITIONER AND REVIEW CO  
1899.

# INDEX TO VOL. XXIV.

## LIST OF CONTRIBUTORS.

Aikins, W. H. B., M.D.	McCaig, A., M.D.
Anderson, H. B., M.D.	McCassey, J. H., M.D., Dayton, Ohio.
Baines, Allen, M.D.	McCræe, Thomas, M.B.
Balfour, J. D., M.D.	McIlwraith, K. C., M.B.
Bingham, George A., M.B.	McIntosh, J. W., B.A., M.B.
Brown, J. Price, M.D.	McKenzie, B. E., B.A., M.D.
Bruce, Herbert A., M.D.	McKenzie, A. F., M.D., Monkton.
Bryans, W. F., M.B.	McMahon, T. F., M.B.
Burnham, Herbert G., M.D.	Morton, John P., M.B., Hamilton.
Caven, John, B.A., M.D.	Oldright, William, M.A., M.D.
Chambers, Graham, B.A., M.D.	Osler, William, M.D.
Ferguson, John, M.A., M.D.	Page, C. A., M.D.
Fotheringham, J. T., M.A., M.D.	Ross, J. F. W., M.D.
Fraser, R. N., M.D., C.M., Thamesville, Ont.	Ryerson, G. Sterling, M.D., C.M.
Goldie, William, M.D.	Scadding, H. C., M.D.
Graham, J. E., M.D.	Smith, Bruce R. W., M.D.
Graham, W. E., M.D.	Smith, A. Laphorn, M.D.
Greig, W. J., M.D.	Smith, Charles Merrill, M.B., Orangeville.
Groves, A., M.D., Fergus.	Starr, Clarence L., M.D.
Hall, Ernest, M.D.	Sutherland, Geo. A., M.B.
Hamill, W. E., M.D.	Sweetnam, I. M., M.D.
Hamilton, H. J., M.D.	Thistle, W. B., M.D.
Hobbs, A. T., M.D., London, Ont.	Weleh, William H., M.D.
King, E. E., M.D.	White, W. C., M.B.
Klotz, Julius E., M.B., Vienna.	Wright, Adam H., B.A., M.D.
Macdonald, A. A., M.D.	Wright, H. A., M.D.
Martin, F., M.D.	

## LIST OF ARTICLES.

	PAGE	PAGE	
Abdominal Cases, Co-operation of Surgeon and Physician.....	591	456	
Abdominal Palpitation, Treatment of.....	520	649	
Abortion.....	68	458	
Abscess, Chronic, of Naso-Pharyngeal Vault, Case of.....	119	36	
Acetonuria.....	647	107	
Acne, Prescription for.....	63	231, 654	
Adenoids and Enlarged Tonsils and Their Removal, with Notes.....	586	643, 693	
Adenoids, Polyuria and Incontinence as Symptoms of.....	298	696	
Albuminuria Complicating Pregnancy, Notes of a Case of.....	77, 94, 636	113	
Alcoholic Delirium, Apomorphine in Acute.....	693	686	
Alopecia Areata, Trikresol in.....	695	829	
Amputation, Double, of Both Arms at Elbow-Joint.....	263	23	
Anderson and Page.....	318	Appendicitis, Recurrent, Vermiform Appendix Removed for.....	220
Anesthetics, Administration of, to Children.....	459	Arterial Sclerosis and Cerebral Hemorrhage and Thrombosis.....	521
Anesthetists, A Suggestion for.....	357	Arthritis Ossificans.....	216
Anesthesia by Chloroform and Ether.....	592	Arthritis, Purulent, and Friedlander's Pneumococcus.....	53
Anemia, Pernicious.....	239, 323	Arthropathies, Relapsing.....	650
Anemia, Splenic.....	223	Astragalus, The, in Congenital Talipes Equino-Varus.....	276
Aneurism of Arch of Aorta.....	156	Asymmetry of Frontal Sinus Revealed by Operation, A Case of.....	460
Anger, A Study of.....	720	Atropine in Delirium Tremens, The Use of.....	458
Angioma, Multiple.....	260	Bacillus, Timothy Hay.....	216
Antiseptic Treatment of Respiratory Passages.....	644	Bacillus, Typhoid, in Cider.....	116

INDEX TO VOL. XXIV.

PAGE	PAGE		
Bacillus Icteroïdes and Bacillus Cholerae Suis .....	533	Janics, Politzer and Gruber .....	567
Bacteria and Calculi .....	49	Club-Foot, Congenital .....	692
Bacteriology and Pathology .....	49	Club-Foot, Treatment of .....	107
Bacteriology of Noma of the Vulva, The .....	179	Cocaine Addiction, Diagnosis of .....	450
Bed-Sores .....	645	Coccidial Infection, A Case of .....	415
Biliary Calculi in Children .....	363	Coccidiosis in Liver of Rabbit .....	331, 331
Black-mailing Extraordinary .....	97	Cœur Biloculaire .....	331
Blastomyces as Sources of Infection of Malignant Tumors .....	295	Colic, Acute .....	239
Blood Examination in Gynecology .....	648	Colitis, Mucons, A Case of .....	18
Boils in the External Auditory Canal .....	113	Coma, Diabetic, The Treatment of .....	103
Boulliaia .....	190	Consumptive Poor, Best Methods of Dealing with .....	582, 598
Brachycardia, A Case of .....	263	Cornea, Artificial .....	111
Breast, Duct Carcinoma of the, Schleich's Solution of Cocaine used at Operation of .....	261	Coryza, The Treatment of .....	106, 461
Breast, Malignant Disease of the .....	225	Correspondence .....	360, 366, 476
Bright's Disease .....	63	Cranicectomy for Microcephalus .....	558
Bronchitis .....	645	Criminals and Their Characteristics .....	395
Broncho-Pneumonias of Children, Belladonna in the .....	695	Cryptorehid .....	265
Bruce, Herbert A. .....	65	Curettement, Danger of, after Abortion .....	292
Brown, J. Price .....	385	Cyclo-Therapeutics .....	355
Burnham, Herbert G. .....	617	Cyclic Vomiting .....	181
Calot's Treatment of Spinal Cases .....	354	Cyst of Broad Ligament .....	598
Calculi, Tonsillar .....	118	Cyst of Epiglottis .....	655
Calculi, Uric Acid .....	25	Cystic Diseases of the Breast .....	365
Calculus, Phosphatic .....	25	Dermatitis Herpetiformis .....	265
Calculus, Removal of, from Common Bile Duct .....	172	Diabetes, Acute .....	413, 620
Calculus, Renal, The X-Rays in Diagnosis of .....	104	Diabetes, Mellitus, The Liver in .....	348
Cancer of the Stomach, Surgical Treatment of .....	103	Digestive Disorders of Infancy, Treatment of .....	579
Cancer, Scirrhus, of the Breast .....	158	Dionin .....	546
Cancer, Some Observations on the Treatment of .....	530, 592	Diphtheria .....	362
Capsules, Supra-renal Caseation of .....	115	Diphtheria, Antitoxin Treatment of .....	168
Carcinoma Duct of the Breast .....	225, 261	Diphtheria, Value of Negative Cultures after .....	298
Carcinoma of the Cardia, Gastrostomy and Curettement of .....	35	Diplopia and Polyopia, Monocular, Observations on .....	14
Carcinoma of the Esophagus .....	235, 328	Diseases and their Treatment .....	33
Carcinoma of the Leg .....	328	Deminion Registration .....	593, 702
Carcinosis, Case of .....	327	Duct Carcinoma of the Breast .....	261
Cardiac Insufficiency, Drugs in .....	637	Dysarthria and Delay in Learning to Speak following Cerebral Disturbance in Infancy .....	263
Cardiac Neurosis .....	139	Dysphonic Nervous Cough .....	404
Cases in Practice .....	323	Ear, Nose and Throat Work, as Taught in Berlin and Vienna, A Few Notes on .....	657
Cataract of the Stomach .....	545	Eclampsia .....	648
Cautery, Electric, in the Nose, The Abuse of .....	117	Eczema, Notes on Treatment of .....	414, 437
Caven, John .....	68	Edema, Hysterical, Paroxysmal .....	297
Cerebro Spinal Fever, Etiology and Diagnosis of .....	447	Editorials .....	26, 96, 159, 227, 278, 325, 420, 470, 536, 608, 661, 701
Chambers, Graham .....	437	Education, Medical .....	96
Chancre, Bilateral, of the Eye-lids .....	54	Electrolysis and Cataphoresis in the Treatment of Inoperable and Recurrent Malignant Disease .....	411, 504
Charecot's Joint Disease, Amputation for, A Note on .....	172	Elbow, Excision of, for Tubercular Disease .....	92, 216
Cholelithiasis, Clinical Notes of Cases of .....	157	Elbow-joint, Tuberculous Bone in .....	217
Christian Science .....	577	Emphysema, Subcutaneous, A Case of .....	581
Chronic Polymyellitis Anterior, Two Cases of .....	204	Endermol--Use in the Treatment of Scabies .....	288
Circumcision, Its Moral and Physical Necessities and Advantages .....	544	Endocarditis, Acute, Infective, with Embolism in Cardiacdextra Congenitalis .....	325
Climatology and Public Health .....	240	Endocarditis in Tuberculosis .....	49
Clinic, Hofrath Fuch's .....	129	Endocarditis, Malignant, Serumtherapy in .....	60
Clinical Notes .....	18, 77, 203, 258, 321	Endocarditis, Ulcerative and Gonorrhæal Septicæmia .....	178

	PAGE		PAGE
Enucleation, Simple, not a Proper Surgical Procedure.....	356	Gonorrhea, The Importance of Cleanliness in Treatment of.....	107
Epilepsy, The Management of.....	170, 517	Gottingen, Medicine in.....	512
Epilepsy, Jacksonian.....	92	Grave's Disease, Treatment of.....	639, 655
Epiphysis of the Femur.....	524	Groves, A.....	134
Epiphysis of Co Calcis Separated by Osteomyelitis.....	331	Gynecological Case, Peculiar.....	400
Epistaxis.....	694	Gynecological Diagnosis, Significance of Pain in.....	43
Epistaxis, Recurrent. The Treatment of....	233	Gynecology, Progress of.....	152
Epithelioma, Intrinsic, of the Larynx.....	464	Gynecology, Surgical, Among the Insane ..	379
Ergot, Present Status of, in Obstetric Practice.....	414	Hair.....	644
Erysipelas, with Treatment by Marmoreck's Serum.....	582	Hamill, W. E.....	16
Estlander's Operation.....	95	Hay Asthma.....	238
Etiological Diagnosis, by Means of the Skin-graph, of Obstinate Intercosto-Brachial Neuralgias.....	689	Hay Fever.....	231
Eustrongylus Gigas, from Kidney in Mink..	271	Headaches.....	239, 654
Exophthalmos, Acute.....	156	Heart Disease from an Obstetrical Point of View.....	671
Exostosis of the Os Calcis.....	109	Heart Disease in Fetus and Children.....	180
Exstrophy of the Bladder.....	596	Hematoma, Abscess and Serous Cyst of the Nasal Septum.....	117
Eye Diseases.....	54	Hemophilia.....	287
Eye Affections, Some Points in the Diagnosis of.....	411	Hemorrhage, Cerebral.....	276
Eye-lids, Bilateral Chancere of the.....	54	Hemorrhage by Gelatin, The Control of....	290
Eye-strain.....	16	Hemorrhage Pharyngeal, A Fatal Case of...	232
Ferguson, John.....	139	Hemorrhage, Post-partum.....	174, 175
Fibrinous Rhinitis.....	358, 410	Hepatic Cirrhosis, The Indirect Treatment of Hepatic Insufficiency.....	374
Fibroid Nodules, Supra-Arterial, Epicardial First-Aid Package in Military Surgery.....	534, 524	Hernia, Treatment of.....	409
Forearm and Hand, Operation for Relief of Deformity of, Following Infantile Hemiplegia.....	692	Hip Disease, Treatment and Results.....	1
Foreign Body Impacted in the Naso-Pharynx	462	Hobbs, A. T.....	379, 499
Formaldehyde Disinfection, An Experience with.....	578	Hofrath Fuch's Clinic.....	129
Formaldehyde upon the Digestive Ferments, The Influence of.....	237	Holocain, The Use of, in Eye Practice.....	110
Fornalin for Sweating Feet.....	237	Hydrogen Dioxide.....	642
Fotheringham, J. T.....	375, 597	Hygiene.....	465, 657
Fracture of Femur.....	635	Hyascine.....	375
Fracture of the Skull, Complications and Treatment of.....	534	Hydro-Nephrosis.....	609
Fracture Ununited.....	332	Hypertrophy, Cardiac.....	215
Fracture Ununited, of Radius and Ulna.....	222	Impetigo Contagiosa.....	604
Fraser, R. N.....	504	Immunity, Theories of Recent Contributions to.....	311
Friedreich's Ataxia.....	633	Inebriates, Report of Committee on.....	595
Gall-Bladder, Surgery in.....	591	Inebriety, The Pathology of.....	636
Gangrene, Carbolic Acid, Two Cases of.....	221, 237	Infantile Convulsions, The Treatment of...	639
Gangrene, Lung.....	297	Infection, Acute Streptococcus, A Case of..	203
Gas-light, Acetylene, for Examination of the Eyes.....	54	Infection, Staphylococcus.....	21
Gastric Ulcer, Case of Perforation.....	349	Infant Feeding and Infantile Diarrhea.....	547
Gastric Secretion.....	643	Influenza in its Relations to the Middle Ear	111
Gastrostomy and Curettement of Carcinoma of the Cardia.....	35	Injection, Hypodermic, of Bichloride of Mercury, Death from.....	105
General Practitioner.....	74	Injection, Intracerebral, of Antitoxin in Tetanus.....	372
Gestation, Ectopic.....	294	Injections, Intravenous, of Normal Saline Solution.....	45
Glaucoma, Massage and the Relief of Eye-strain in the Treatment of.....	578	Injections of Saline Solution in Shock.....	38
Goltre, Exophthalmic.....	694	Injury of the Forearm.....	260
Goldie, William.....	433	Insane, Surgical Gynecology among the.....	379, 597
Gonococcus in Ulcerated Endocarditis, The	348	Insanity, Causation of.....	499
		Insanity Defined in the Basis of Disease....	457
		Insanity Plea in Medical Jurisprudence, The	513
		Intestinal Canal, Chronic Affection of.....	445
		Intra-Nasal Operations, Use of Rubber Splint in the Treatment of.....	385
		Intussusception.....	56

	PAGE		PAGE
Intussusception, Multiple, of the Dying.....	215	Mole, Vesicular, Case of.....	527
Iritis .....	531	Morton, John P.....	120, 567
Iron, Administration of.....	645	Morphine and Ether on Uterine Pains. Influence of .....	47
Jacksonian Epilepsy, Trephining in.....	609	Mosquitoes and Malaria .....	660
Jambul in Diabetes Mellitus.....	288	Muscular Dystrophy, A Case of.....	400
Jaundice, Obstructive, in Children.....	290	Myelocle-Syringo, Twins, Each with .....	205
Kidney, Disease of, Amenable to Surgical Treatment .....	416	Myxedema and Allied Disorders.....	31
Kidney, Granular .....	281	Nasal Treatment of Asthma.....	465
Kidney, Movable, The Treatment of.....	105	Nasal Insufficiency, Due to Exaggerated Prominence of the Anterior Arch of the Cervical Vertebrae .....	461
Kidney, Third, Independent.....	171	Nasal Passages, Cleansing Solution for.....	73
Knee-Joint, Internal Derangements of the..	690	Naso-Pharyngeal Polypi of Enormous Size..	358
Koher's Method of Radical Cure of Hernia, A Note on.....	410	Necrosis, Phosphorus, and Tuberculosis ..	180
Labor, On the Relief of Suffering in.....	173	Necrosis, Fat, with Hemorrhage and Acute Pancreatitis.....	68
Lactophenin as a Hypnotic.....	60	Neuralgia .....	230
Largin.....	546	Neuroses, Cardiac.....	139
Laryngeal Chorea of Reflex Origin, Report of a Case of.....	656	Neurosis, Fear .....	30
Laryngeal Growths in Young Children. Remarks on.....	463	Neusser's Perinuclear, Basophilic Granules in the Blood .....	177
Laryngeal Paralysis .....	656	Nipples, Cracks in, Painless Treatment of ..	290
Laryngology and Rhinology 116, 231, 353, 460,	652	Nipples, Treatment of Fissure of .....	176
Lead Poisoning from Water Pipe.....	660	Nose, Tubular Epithelioma of the .....	358
Leucorrhœa, The Topical Use of Quinine in..	174	Nosology of the So-called Functional Diseases, The .....	520
Liver, Enlarged Cirrhotic.....	217	Nurse, The, as a Specialist.....	721
Liver, Protective Action of the, against Microbes.....	114	OBITUARY—	
Lupus Erythematosus, Treatment of .....	458	Campbell, James B.....	605
Lung, Foreign Bodies in the, Simulating Tuberculosis .....	234	Clarke, John .....	303
Malaria, Splenectomy in .....	190	Clemens, Levi Bowman.....	249
Malaria, Tropical, A Case of .....	258	Charlton, Stanley .....	303
Malignant Disease, Electrolysis and Catharosis in the Treatment of.....	504	Comfort, William .....	665
Mammary Gland, Carcinoma and Tuberculosis of.....	530	Cooke, Thomas.....	251
Management of Difficult Breech Labors.....	10	Coverton, Theodore S.....	248
McCassey, J. H. ....	305	Cumming, James .....	613
McCrae, Thomas.....	512	Dack, Thomas Benjamin .....	542
Mellin's Food, K. C.....	148	Day, Samuel Dominion .....	303
McKenzie, A. F.....	620	Duck, William B .....	121
McKenzie, B. E.....	390	Duncan, John .....	613
McMahon, T. F.....	498	Dunnington, W. H .....	188
Medical Education in Different Countries..	625	Etheridge, James Henry .....	251
Medical Experience Is Built Gradually ..	722	Gaviller, Archibald Charles .....	249
Medical Items .....	229, 282, 342	Graham, James Elliott .....	480
Medical Profession in South Africa, The....	701	Hagel, Samuel David.....	709
Medicine .....	30, 165, 284, 347, 456, 520, 636,	Herod, George Samuel .....	121
Medicine in Gottingen.....	689	Hopkins, Nicholas .....	250
Meningitis .....	55	Hyndman, John .....	665
Meningitis, Cerebro-spinal .....	56, 79, 93	Jardine, Joseph .....	121
Meningitis Due to Primary Pneumococcus Infection .....	19	Jones, Henry .....	250
Meningococcus in the Nasal Secretions, Presence of the.....	52	Logan, George .....	709
Menopause and the Kidneys .....	60	Machell, Arthur George .....	248
Menstruation from the Ear, A Case of.....	689	Jacklin, Henry P.....	303
Metatarsalgia.....	353	Morison, Fred.....	303
Microscopical Specimens.....	632	Mullin, John Alexander.....	188
Militia Medical Service, The.....	703	McCallum, Duncan .....	577
		McCausland, Henry Porter .....	249
		McDonald, Charles .....	247
		Neilson, W. M.....	251
		Potts, Robert Burns.....	486
		Rohe, George Henry .....	251

	PAGE		PAGE
OBITUARY ( <i>Continued</i> )—		Phthisis, New Method of Treating .....	340
Rutherford, William .....	250	Phthisis, Night-sweats of .....	604
Scott, William Francis .....	250	Phototherapy .....	636
Struthers, Sir John .....	251	Physiological Effects of Castration in the Male and Female .....	492
Tait, Lawson .....	484	Pliocarpin, The Use of .....	640
Wells, Williams .....	542	Pleuritic Fluid, Diagnosis of Tubercle Bacilli in .....	531
Woods, Edward Robinson .....	121	Pneumonia in the Aged .....	523
Wright, Henry Hoover .....	246	Polio-myelitis, Acute Anterior .....	640
Yonker, William .....	121	Politzer and Gruber Clinics, The .....	567
Observations on Monocular Diplopia and Polyopia .....	14	Polio-myelitis, Anterior Chronic, Two Cases of .....	204
Obstetrics and Gynecology. 43, 173, 291, 429, 526, 647		Polyopia and Diplopia, Monocular, Obser- vations on .....	14
Obstetrical Methods in Dublin and London .	143	Polymyositis .....	167
Obstetric Practice, Golden Rules of .....	647	Polypus, Mucous-Fibrous .....	698
Oesophagus, Malignant Diseases of .....	65	Post-Graduate Work in London .....	99
Oldright, William .....	68	Potts' Disease, Forcible Reduction in .....	355
Ophthalmology and the General Physician .	617	Practitioner, The General .....	74
Ophthalmology and the General Profession.	412	Pregnancy, Chronic Valvular Disease in .....	526
Ophthalmology and Otolaryngology .....	54, 110, 356	Pregnancy, Extra-Uterine, Diagnosis of ....	291
Original Communications .....	1, 65, 129, 193, 255, 311, 375, 433, 493, 547, 617, 671	Pregnancy, Normal, Hypotoxicity of the Urine of .....	533
Orthoform and New Orthoform .....	176	Pregnancy, Vomiting of .....	647
Orthoform in Toothache .....	290	Preliminary Communications in the Spread of Tuberculosis .....	433
Orthopedics .....	107, 353, 690	Prepuce, The .....	641
Os in Parturition, a Rigid, A Speedy Method of Dilating .....	47	Prevention of Premature Old Age .....	458
Osier, William .....	447	Progress of Gynecology .....	152
Otitis Media with Purulent Meningitis, A Case of .....	82, 92	Progress of Medical Science, 30, 101, 165, 230, 284, 347, 426, 456, 520, 602, 636,	689
Ovaritis, Chronic and Cystic, Ignipuncture of the Ovary for .....	48	Protargol .....	356
Oyster Fever .....	347	Pseudo-Membranous Rhinitis, Non-Diph- theritic .....	461
Pain, Significance of, in Gynecological Diag- nosis .....	43	Puerperal Infection, Local Treatment in ...	136
Pancreatitis, Acute, with Hemorrhage and Fat Necrosis .....	68	Pulmonary Tuberculosis, Home Treatment and Prevention of .....	493
Pathogenic Diplo-Bacillus in Human Con- junctivitis, A .....	115	Pyo-Pneumo Thorax .....	274
Pathological Specimen—Appendix Vermi- formis .....	698	Pyrophlebitis .....	321
Pathology and Bacteriology. 49, 113, 177, 295,	530	Reform, Military Medical .....	100
Epitheliomatous Growths .....	642	Rheumatic Arthritis and Gout .....	347
Paralysis, Bulbar, A Case of .....	119	Rhinitis, Acute, Septic, of Childhood .....	652
Paralysis, Diphtheritic, on the Pathology of.	118	Rhinitis of Inherited Syphilis .....	653
Paralysis, Spastic, Surgical Intervention in Cases of .....	390	Rhinolith .....	224
Parasite in Bloody Pleuritic Exudation, A New .....	62	Rupture, Intra-peritoneal, of the Urinary Bladder .....	40
Pediatrics .....	55, 181, 298, 393, 602,	Rupture of the Perineum, Secondary Opera- tion for .....	520
Pediatrics, Serum Diagnosis in .....	192	Ryerson, G. S. ....	14, 73, 193
Pelvic Exudate .....	648	Sacro-iliac Disease .....	39
Pelvic Floor, Repair of Injuries to .....	650	Sanatoria for Consumptives .....	34
Pelvic Peritonitis .....	650	Sarcoma of Vagina .....	160
Pericarditis in Children .....	607	Satellitism of Colonies of Pfeiffer's Bacillus in Mixed Cultures .....	52
Peripheral Neuritis .....	364	Scarlet Fever, The Micro-Organism of .....	532
Peritoneal Affection resembling Tubercu- losis caused by the Eggs of Tapeworms.	723	Serofula, Iodide of Arsenic in .....	63
Peritonitis, Septic, A Case of Laparotomy, Recovery .....	41	Sediments, Organized, Preservation of. . .	53
Personality, A Case of Triple .....	732	Selected Articles .....	85, 207, 517
Personals, 120, 184, 230, 301, 344, 425, 474, 511, 611, 664, 700		Selections .....	60, 190, 492, 545, 719
Phthisis, Ichthyoid in .....	723	Seminal Vesicles in Health and Disease .....	410
Phthisis, Laryngeal, Treatment of .....	234	Sepsis, Intra-Uterine, The Local Treatment of .....	134

	PAGE		PAGE
Sepsis, Puerperal.....	48	Tannaform.....	289
Septicæmia, Gonorrhæal and Ulcerative Endocarditis.....	178	Tetanus, Treated with Antitoxin.....	623
Septum, Nasal, Hematoma, Abscess and Serous Cyst of the.....	117	Therapeutics...104, 236, 287, 436, 458, 635, 643, 693	326
Serum as a Cure and Preventive in Yellow Fever.....	50	Thyro-glossal Duct, Persistent.....	326
Sewers in Health.....	658	Thyroid Gland, The Physiology and Therapeutics of.....	450
Shoulders, Round.....	108	Thyroid Gland, at Base of the Tongue.....	359
Skin Clinic at St. Michael's Hospital.....	582	Thyroidin, The Anaphrodisiac Action of....	62
Skin, Sterilization of the.....	719	Thyroid Therapy.....	236
Sleeplessness, Treatment of.....	523	Thrombosis of the Mesenteric Veins.....	36
Spasm, Facial.....	25	Thyrotomy for Epithelioma of the Larynx..	119
Small-pox.....	53	Tongue, Black.....	299
Smith, Charles Merrill.....	74	Tongue-tie, Acquired.....	118
Smith, Laphorn.....	152	Tongue, Paralysis of.....	300
<b>SOCIETIES, MEETINGS OF MEDICAL—</b>			
American Association of Obstetrists and Gynecologists.....	600	Tonsil, The, as a Point of Entrance for Severe General Infectious Diseases.....	50
Canadian Medical Association.....	572	Torticollis, Notes of a Case of.....	413
Dufferin Union Medical Association.....	371	Tracheotomy in Tubercular Perichondritis..	233
London Medical Association.....	94	Tracheocele.....	298
Ontario Medical Association.....	400	Trachoma, Modern Views on.....	357
Southern Surgical and Gynecological Association.....	75	Treatment of Eczema, Notes on.....	437
Toronto Clinical Society, 25, 92, 156, 222, 264, 332, 631,	698	Treatment of Intra-Uterine Sepsis.....	134
Toronto Pathological Society, 214, 271,	327	Treatment of Puerperal Infection.....	136
Soda, Bicarbonate of, in Treatment of Suppuration.....	238	Tuberculosis.....	55, 596, 558, 657
Sodium Sulphate in Chronic Mucous Catarrh of the Stomach.....	287	Tuberculosis of Aorta.....	113
Soldier and Surgeon, The.....	193	Tuberculosis, Etiology and Prophylaxis of..	245
Solution, Cleansing, for the Nasal Passages..	73	Tuberculosis, Endocarditis.....	295
Solution, Saline, Injections of, in Shock....	38	Tuberculosis, Phosphorous.....	160
Somatose, The Administration of.....	245	Tuberculosis in Canadian Cattle and its Prevention.....	572
Sphincter Ani Muscle, The Dissection and Liberation of.....	292	Tuberculosis and Insurance.....	588
Spina Bifida.....	682	Tuberculosis, Pulmonary, Home Treatment and Prevention of.....	498
Splints, Rubber, The Use of, in the Treatment of Intra-Nasal Operation.....	385	Tuberculosis Symposium.....	403
Starr, Clarence L.....	225	Tuberculosis of the Throat.....	638
Staphylococcus Infection.....	21	Tuberculosis, Preliminary Communication on the Spread of.....	433
Sterilizing Cat-gut, A Simple and Effectual Method of.....	41	Turbinal, The Offending Middle.....	653
Steel in the Vitreous.....	55	Tumor, Abdominal.....	224
Stock Yards, Chicago, Report of an Investigation at the.....	465	Tumors, Bilateral, of the Septum.....	116
Story of Medical Life.....	207	Tumor, Cerebral, of the Left Frontal Lobe.....	89, 93
Streptococcus Infection, A Case of.....	203	Tumors, Cerebral, Successfully Removed by Operation.....	102
Strychnine Poisoning, A Case of.....	643	Tumors of the Naso-Pharynx.....	232
Summer Complaint in Children.....	457	Tumor of Spinal Cord.....	80, 93
Suprarenal Gland, The Functions of.....	457	Typhoid Bacillus in the Urine.....	492
Suprarenal Glands of Sheep.....	361	Typhoid Fever, Treatment of.....	57, 638
Surgery.....	38, 101, 171, 349, 524,	Typhoid Fever, The Use of Peptones in....	631
Surgery, Address in.....	501	Typhoid Fever, Relapse in.....	409
Surgical Gynecology among the Insane.....	379	Typhoid, Intra-Uterine.....	51
Surgical Interference and Surgical Intervention.....	64	Typhoid and the Spanish War.....	115
Surgical Intervention in Cases of Plastic Paralysis.....	390	Ulcers, Corneal, and Abrasions.....	112
Surgical Sins.....	643	Ulcers of Stomach, Treatment of.....	236
Syringo-myelia with Pharyngeal and Laryngeal Lesions.....	364	Ulcers and Wounds, Reactions in Cases of, Treated by Oxygen Gas.....	101
Syringo-myelocèle, Twins Each with.....	205	Uremia of Nephritis, Treatment of.....	104
		Urethritis, Bacterium Coli Com. as Cause of	116
		Urinary Disinfectant, A New.....	289
		Urine, Ehrlich's Diazo Reaction in.....	61
		Urinals, Oil in.....	60



	PAGE		PAGE
Uterine Fibromyomata, Surgical Treatment of.....	619	War in South Africa, The.....	702
Uterus, Instrumental Perforation of the.....	61	Wehnelt's New Interrupter.....	360
Vaccination and Small-pox.....	347	Weill's Disease.....	37
Vaginismus and Vaginitis.....	239	Welch, William H.....	311
Vesical Calculi.....	267	Whooping-cough.....	458
Voice, from a Medical Standpoint.....	233	Whooping-cough, Paralysis in.....	690
Vomiting in Pregnancy, Treatment of.....	46	Woillez's Disease.....	530
Vulva, The Bacteriology of Noma of the.....	179	Wound Infection, a Factor in Insanity.....	499
		Wounds and Ulcers.....	101
		Wright, Adam H.....	10, 136

## BOOK REVIEWS.

	PAGE		PAGE
A Text-Book of Embryology for Students of Medicine. By John Clement Heister, M.D.	714	Minor Surgery and Bandaging. By Henry R. Wharton, M.D.....	718
A Text-Book of the Practice of Medicine. By James M. Anders, M.D., Ph.D. LL. D..	710	Nervous and Mental Diseases. By Archibald Church and Frederick Peterson.....	370
A Text-Book of Materia Medica, Therapeutics and Pharmacology. By George Frank Butler, Ph.G., M.D.....	713	Nervous System and its Constituent Neurons. By Lewellys F. Barker.....	666
American Text-Book of Genito-Urinary and Skin Diseases. By L. Rolton Bangs.....	123	Newer Remedies, The. By V. Coblentz.....	432
American Text-Book of Diseases of the Eye, Ear, Nose and Throat. By G. E. De Schweinitz.....	395	Physician's Visiting List.....	718
American Year-Book of Medicine and Surgery. By George M. Gould.....	182	Physiology -A Manual for Students and Practitioners. By Howard D. Collins, M.D.	712
Anatomy of the Central Nervous System of Man. By Prof. Ludwig Edinger.....	488	Pocket Formulary for the Treatment of Diseases in Children. By Ludwig Freyberger.....	306
Earthow's Materia Medica and Therapeutics.....	714	Pocket Medical Formulae. By William B. Saunders.....	307
Chemistry. By John Attfield.....	310	Practice of Medicine. By George E. Malsbary, M.D.....	712
Clinical Observations and Two Thousand Obstetric Cases. By G. Porter Matthews.	122	Practice of Obstetrics. By Charles J. Nettl.....	367
Clinical Report of the Rotunda Hospital for one Year. By R. Dancer Purefoy.....	182	Practical Hand-Book of the Muscular Anomalies of the Eye. By Howard F. Hansel and Wendall Heber.....	128
David Harum. By Edward Noyes Westcott.	252	Practical Materia Medica for Nurses. By Emily A. Stoney.....	432
Diseases of Children. By George M. Tuttle, M.D.....	710	Principles which Govern the Treatment of Diseases and Disorders of the Heart. By Sir George Douglas Powell.....	252
Diseases of the Eye. By G. E. DeSchweinitz	301	Progressive Medicine. By Hobart Armory Hare.....	304, 614
Diseases of the Skin. By George Thomas Jackson.....	308	Pycorrhoea Alveolaris, and its Relation to General Medicine. By John Fitzgerald.....	513
Diseases of Women. By George Ernest Herman.....	123	Sajous Annual and Analytical Cyclopaedia of Practical Medicine.....	305, 499, 715
Enlargement of the Prostate. By C. W. Mansill Moullin.....	615	Sanders' Question Compendis. By Charles B. Nancrede, M.D.....	715
Essay on the Nature and Consequences of the Anomalies of Refraction. By Prof. F. C. Donders.....	305	Self-Examination for Medical Students.....	182
Essentials of Bacteriology. By M. V. Ball.....	308	Text-Book of Diseases of Nose and Throat. By D. Braden Kyle.....	670
Essentials of Medical Chemistry, Organic and Inorganic, containing also Questions of Medical Physics, Chemical Philosophy, Analytical Processes, Toxicology, etc. By Lawrence Wolff, M.D.....	715	Text-Book of Mechano-Therapy. By Axel V. Grafstrom.....	183
Extra-Uterine Pregnancy. By John W. Taylor.....	668	Text-Book of Obstetrics. By Barton Cooke Hurst.....	59
Favorite Formulae of Various Teachers, Authors and Practising Physicians.....	543	The American Pocket Medical Dictionary. By W. A. Newman Dorland, A.M., M.D.....	711
Fractures and Dislocations. By H. Helfreich.....	309	The American Year-Book of Medicine and Surgery. By Samuel W. Abbott, M.D.....	711
Hygiene of the Mouth. By Denison Pedley.....	614	The Hygiene of Transmissible Diseases; Their Causation, Modes of Dissemination, and Methods of Prevention. By A. C. Abbott, M.D.....	716
International Clinics.....	369	The Sexual Organs—Their Use and Abuse. By J. E. Heller Hett.....	714
International Medical Annual for 1899.....	183	Treatise on the Principles and Practice of Gynecology. By E. C. Dudley.....	614
Manual of Organic Materia Medica. By John M. Maisch.....	488	Treatise on the Science and Practice of Midwifery. By W. S. Playfair.....	120
Materia Medica, Therapeutics, Medical Pharmacy, Prescription Writing and Medical Latin—A Manual for Students and Practitioners. By Wm. Schleich, M.D.....	711	Treatise on Unripe Cataract. By Wm. K. McKeown.....	126
Medical Complications, Accidents and Sequela of Typhoid or Enteric Fever. The. By Hobart Armory Hare.....	434	Treatment of Pelvic Inflammations through the Vagina. By Wm. R. Pryor.....	616
Mineral Waters of the United States and their Therapeutic Uses. By James K. Cook.....	543	Transactions of the College of Physicians of Philadelphia.....	307
		Warner's Pocket Dictionary.....	615
		Warner's Pocket Medical Dictionary of Today. By William R. Warner.....	710

# The Canadian Practitioner and Review.

---

VOL. XXV.

TORONTO, JANUARY, 1899.

No. 1.

---

## Original Communications.

---

### HIP DISEASE: ESPECIALLY A REVIEW OF ITS TREATMENT AND RESULTS.\*

BY B. E. MCKENZIE, R.A., M.D.,

Surgeon to the Toronto Orthopedic Hospital; Surgeon for Out-Patients at the Toronto General Hospital; Assistant Professor of Clinical Surgery Ontario Medical College for Women; Member of the American Orthopedic Association.

The term "hip disease" has come to have a very definite signification as employed in the literature of surgery to-day. It signifies the pathological state resulting from invasion by the bacillus tuberculosis of the structures which enter into the formation of the hip-joint, and in this sense I shall employ the term.

The joint affection, in one sense, is nearly always secondary: *i.e.*, the virus, introduced elsewhere and present in the blood, has developed at the joint because it found there a nidus well suited to its growth—but in a still more important sense is it secondary. König found that in 79 per cent. of cases it was demonstrated that there was some focus of tubercular disease elsewhere before its manifestation in the joint.

Primarily only the cancellous bone and the synovial structures are infected. There is a general consensus of opinion that in children the disease commonly starts in the bone, while in adults the synovial membrane is more frequently its primary location. As in all other cases, the ultimate results must depend greatly upon early and accurate diagnosis. If minor affections in the vicinity of the hip, or if even the less serious affections of the joint itself be considered hip disease,

---

\* Read before the Toronto Medical Society, December 15th, 1898

then results will seem to be more satisfactory than those which may reasonably be expected.

CASE 1. A. C., girl, seven years. Her father, a physician, informed me that the child had been lame a couple of weeks. I found a temperature of  $103^{\circ}$ , fixation of femur on pelvis with marked flexion and adduction. Family history good. Child was very restless, and when taken from the bed would not put foot of the affected limb upon the floor. There was a history of a possible sprain. Father had made a diagnosis of hip disease, but in this I could not concur. A definite diagnosis was not made, considering the case one of either acute epiphysitis, bursitis, or a simple synovitis. A few weeks' rest in bed resulted in a complete and permanent restoration to health.

CASE 2. Albert P., six years, in good health until one month previously, when he had fallen from a lumber pile, but was not much hurt and went to school next day. Was lame and remained at home for the next four weeks, in bed during the last few days. When examined he was very irritable, had a temperature of  $103^{\circ}$ F., marked flexion and adduction of the femur. The attending physician had diagnosed hip disease, in which I concurred, and had a splint made and adjusted. Progress not being satisfactory, I saw the case again after two weeks, when examination under anesthesia revealed, lying above and nearly parallel with Poupart's ligament, a sausage-shaped swelling. Aspiration revealed the presence of pus, which was evacuated by entering behind and below the peritoneum. Recovery rapid and complete.

Seeing that in hip disease the joint tissues are invaded by a virus which tends to destroy them, which is never simply local but also has a nidus elsewhere in the system, the plan of campaign suggested in resisting its ravages is to call to our aid forces both local and general.

Nearly twenty years ago two important steps forward in the science of medicine were made, which supplied a marked stimulus to the operative surgery of joints, viz., the practice of asepticism and the discovery of the bacillus tuberculosis. It is not surprising that, encouraged by these victories, some went to extremes in availing themselves of the security afforded in operative work. An instance of this is seen in the teaching of Barker in his Hunterian lectures in 1887. He made claims so strongly in favor of early operation, resulting in speedy cures, that everywhere there were found surgeons who believed, and who acted on the belief, that as soon as a diagnosis could be made excision of the joint should be performed, thereby removing the femoral head and all diseased tissue and cutting short the course of the disease, forgetting for the moment that they were very rarely able to eradicate all diseased structures

Hence it may fairly be said, without prejudice, that the fulfilment of the fair promises held out by the distinctively operative treatment were not realized.

Immediate healing often occurred, and these cases were sent home sometimes in a month or less, with the operation wound closed.

Compared with the old discharging sinuses which continued to discharge for months or years, this was apparently a most satisfactory and gratifying result, and calculated to beget a hope that, by operative measures alone, these cases could be cured in a short time.

Further observation showed recurrence of the disease in a large proportion of the cases, and that other ills followed, consequent upon this treatment. Even under the most careful management, untoward results, even death, sometimes followed as the direct consequence of the operation. In the cases which took the most favorable course possible, it was found that excision of the femoral head in itself is a cause of no slight disability. In a considerable portion of the cases, the focus of disease at the hip was not the only one in the body, and tuberculosis manifested itself elsewhere. In still other cases the large extent of fresh surface exposed became a menace, because it served for the ready absorption of the tubercular virus.

There are serious hindrances to the successful accomplishment of this purpose. One of the epiphyses, the one most frequently invaded, primarily is so situated as to be entirely within the joint. Its removal calls for an excision which in all cases greatly invalidates the joint function, and permits the limb to slide upward, thus becoming insecure for the purpose of weight bearing.

If the primary focus be in the floor of the acetabulum, as it is in a considerable proportion of cases, it cannot be reached without excision.

Should the primary focus be found at an early date at either of the trochanters or in the synovial membrane, there is a better prospect of its removal without serious interference with the integrity of the joint.

Such definiteness of diagnosis is, however, at present, impossible. An early diagnosis can be made, but to determine the exact location of the primary focus is impossible. Exploratory incision will not help us, because at an early period the disease is hidden in the interior of the bone or in the floor of the acetabulum.

Early operation has been warmly and extensively advocated. During the years 1879-87, Volkmann in his clinic at Halle made many early excisions, but gave up the practice in the latter year as results were not satisfactory. Dr. Geo. A. Wright,

of Manchester, who had treated more than five hundred cases in the six years previous to 1887, and had performed several hundred excisions, says at a later time: "If the cases be taken in time the best results are obtained by rest." In order to afford reasonable hope for eradicating the disease one must cut wide of the affected part and well into sound tissue. This opens up new avenues for reinfection, a fact which experience shows we cannot afford to disregard.

Weighing all the evidence in the case, and giving due weight to facts, the writer is of the opinion that operative interference is seldom justifiable before such time as the breaking down of tissue may be diagnosed.

At this time an opening should be made sufficiently free to enable the surgeon to remove all debris without needless traumatism. In this way not only liquefied and caseous tubercular detritus may be removed, but sometimes a sequestrum is found. It is probably better not to attempt to close the wound but to pack, using iodoform freely, and observing the rules of asepticism.

The loss of the femoral head, whether through operation or the destructive processes of the disease, must be regarded as one of the most undesirable results. In this case the shaft of the femur slides upward, and marked shortening results; but, what is more serious, the end of the femur seldom secures firm anchorage, and when the weight of the body comes upon the limb, the adjustment between the femur and the pelvis is found ill-suited to weight-bearing, so that the lack of fixation causes a very marked limp, the patient soon grows weary, and pressure of the femur upward into tissues not designed to resist such intrusion, causes pain. True it is that, in a proportion of these cases, the upper end of the femur finds a firmer anchorage, and much of disability is thereby overcome.

Shortening of the limb, if it be less than two inches, need not be considered a serious matter. The employment of cork under the boot will readily supply the lack.

Over against these results, obtained by early operations, we may, for purposes of comparison, place those obtained by less radical methods. Previous to the time of antiseptic surgery, the opening of a cold abscess was generally followed by a hectic condition, which slowly but often surely dragged the patient down to the grave. Through the precautions of modern surgery a mixed infection is prevented when these are opened, and not infrequently closure of the abscess cavity is secured.

The indications for mechanical treatment are the same whether we operate or not. Of the various agencies under the surgeon's control, and for the effectiveness of which he should be held responsible, that which is commonly managed with least efficiency is the splint or brace.

As soon as a diagnosis is made, most complete rest should be secured for the affected hip-joint. If deformity exist, it should first be corrected. If the diagnosis be made early, before there is much destruction of tissue, there is generally but little deformity. That which most demands attention at this stage is flexion of the femur upon the pelvis; and it can most conveniently and advantageously be corrected by placing the patient in bed for a few weeks, securing him by a Liston's splint applied on the sound side, and fastened to the bed, while a weight pulls on the affected limb, gradually reducing the deformity. A good hip-splint should fulfil at least two indications. (1) It should effect most complete fixation for the diseased joint, while allowing the patient as much freedom in every other way as is consistent with the attainment of this result. (2) It should prevent the occurrence of deformity. The splint here shown fulfils these indications better than any other known to the writer. It is a modification of the splint long ago designed by the late Hugh Owen Thomas. It consists of a bar of iron made to fit the inequalities of the body and the affected limb, extending from the inferior angle of the scapula over the buttock and back of the thigh and leg to the lower part of the calf, ending here in a bifid portion, which is carried downward below the foot and secured to the body by two bands, the one passing around the thorax and the other about the pelvis, and fastened snugly to the limb by straps or bandages. The bifid portion terminates in a cross-bar joining the two divisions of the fork, which serves as a fixed point from which extension can be made. The lower band is made sufficiently heavy and resisting to bear the strain of one or two straps passing from front to rear under the perineum by which counter extension is made. This lower forked piece is made adjustable so that the splint may be lengthened as the patient grows. The whole is carefully padded and covered with leather, except from the knee downward. The efficacy of the splint and the comfort of the wearer will depend much upon the exactness of the fit which is obtained.

The splint, made somewhat as above described, is frequently employed as a crutch, the patient stepping alternately upon a boot having a high cork sole worn on the sound limb, and upon the end of the splint carried downward below the foot, so as to correspond to the high sole worn on the sound side. This use of the splint is not to be commended, as it induces too free use of the diseased limb. It is better that the patient walk by the aid of crutches, allowing the affected extremity to hang inactive.

The ambulatory treatment has been much abused by advising that the patient should move about as much as possible. The

amount of exercise obtained by the patient does not do much to keep up his muscular development, nor does it greatly aid in the metabolic processes, while the erect position long maintained does produce harmful results, by favoring swelling of the inactive limb. The patient's ability to move about at will is not to be lightly esteemed; it has many advantages for himself and for others. Much of his time, however, should be spent in the recumbent position, either out of doors or in a sunny room. If the splint be well adjusted he soon learns to help himself, and can move from place to place without help, and without danger of injury to the diseased joint.

The teaching of the last few years should not be forgotten nor lightly passed over by the surgeon who is called upon to deal with tubercular joint disease. Pulmonary tuberculosis is to-day considered curable in a large percentage of cases. The most important points in securing efficacy of treatment in this domain are: (1) Early diagnosis; (2) free and constant exposure to pure air; (3) as much sunshine as possible; (4) dry air of high altitudes; (5) good nutrition; (6) as much rest as possible for the affected parts; and (7) measures of prophylaxis.

Evidence, not only in the sphere of surgery, but in that of general medicine, is accumulating and showing more and more clearly that it is by attention to the general disease which is present rather than to its local removal by operative interference that we must look for the best results.

In regard to constitutional treatment, the same directions should be given as in other forms of tuberculosis.

Under such treatment a large proportion of cases will progress constantly toward recovery. If, however, the amount of inflammatory product be more than nature can successfully dispose of by absorption, and if the healthy tissues do not become successfully walled off from the diseased structures, and the virus continue to extend the area of its noxious influence, so that breaking down occurs, then the debris should be removed by operation, the surrounding tissues being wounded as little as possible, trusting largely to natural processes aided by drainage, cleanliness in nursing and good diet to put a stop to the further ravages of the disease and to secure cicatrization.

It is interesting to inquire what are the elements which constitute a successful recovery, and what those which prove a detriment and disability to the patient.

Shortening, of course, may be apparent or real. Real shortening results from (1) displacement upward of the femur through loss of any portion of the head; (2) through lack of growth, so that the diseased limb does not keep pace with its fellow. Apparent shortening results from flexion or adduction,

or from both. This latter form is a serious disability, and cannot be successfully remedied by placing cork under the affected limb.

Marked adduction or flexion as a permanent result is a cause of much disability. If these occur while the disease is still active, then they should be corrected by traction, while the patient is confined to bed, and the corrected position may be maintained by a good splint till recovery results.

If after nature has done her part, and the disease is quiescent, there still be found adduction and marked flexion with ankylosis, indicating that the surgeon has failed in doing his part, then osteotomy must be resorted to. In properly selected cases this is a most satisfactory operation, both in its performance and results.

If with ankylosis there be no adduction, and only a moderate degree of flexion, correction is not called for, as flexion not exceeding twenty degrees is to be considered desirable, as it makes sitting down more comfortable and graceful.

Ankylosis is a desirable result if there be such a loss of bone as to deprive the natural joint of its security, for the purpose of weight-bearing. In any part of the body ankylosis is better than a weak movable joint, except it be in the joints of the upper extremity.

The splint above described is a most desirable one for children, but owing to the fact that its upper part comes to the axillæ, and that it absolutely prohibits the sitting position, and also because that deformity is not so apt to occur in the adult, a splint much like those so much used in the United States may wisely be employed. It may be called a traction splint, whereas the former one is pre-eminently a fixation splint. By the English splint, however, as modified, powerful traction may be obtained, and the American splint secures some degree of fixation. This traction splint consists of a horseshoe-shaped and well-padded pelvic band passing from the diseased side in front and behind the pelvis, and having the opening toward the sound side. Bolted to this band near the centre is a bar which reaches down to a point two or three inches below the foot, or better, reaches as far as the bottom of the foot, and there has a piece at right angles, which passes through a tube in the heel of the boot. One or two perineal straps, placed as in the former splint, serve to force the splint downward, while its attachment to the boot makes traction upon the leg. A high-soled boot should be worn on the sound side, and the patient should walk with crutches, never allowing the foot on the affected side to reach the ground.

In making counter extension by means of the perineal straps, the one pulling upward on the side of the pelvis opposite to



the diseased joint is the more important, and should be rendered the more effective. When only one is employed, this is the one to use. The reason for this is found in the constant tendency of every case of hip disease to terminate in adduction, a deformity that is so objectionable and disabling. By effecting strong counter extension on the sound side of the pelvis while powerful extension of the diseased limb is being maintained, the adduction may soon be corrected.

Not infrequently disaster follows the too early removal of the splint. The very great disposition of nearly every case of hip disease to adduction of the affected limb as convalescence advances does not receive the recognition it deserves. Though the disease may have been long quiescent, yet sometimes adduction continues to increase, and the too early removal of the splint has been known to permit of as much as two inches of needless shortening, with the accompanying secondary curvature of the spine.

Of the hip cases that have come directly under my care during the ten years, 1889-93, and who have advanced to a stage where treatment, because of the activity of the disease, has ceased, I have been able to trace and to obtain fairly reliable records of sixty-nine. Of this number, eight are dead, as follows:

One, a boy of sixteen, had Pott's disease and hip disease, and died of general tuberculosis.

One, a girl of fourteen, who had Pott's disease and hip disease, died of general tuberculosis.

One, a girl of fifteen, had had discharging sinuses for a long time, and died of amyloid disease.

One girl of fourteen had pulmonary tuberculosis, with cavities when first seen.

One man of thirty-four died, two years after recovery from the hip disease, suddenly of some obscure affection.

One boy of sixteen died from typhoid fever two years after recovery from the hip disease.

One boy of eight died of tubercular meningitis, though for several months previously he seemed to be convalescing satisfactorily.

One girl of sixteen died of general tuberculosis with dropsy.

All of these eight cases had suppurated abundantly, and six of the number had manifested signs of the disease for a long time, without having any efficient treatment.

Thirty-six of this number had suppuration. Of those that suppurated, twenty-one made a good recovery; *i. e.*, recovered without deformity, with less than one and a half inches of shortening, and without a marked limp. Of this number, three have recovered without a limp.

Of the whole number of cases, five have recovered without limp, and five others with but a slight limp.

The oldest patient was fifty-eight years of age. Seven patients seen during these years were over twenty years of age, two of the number being each forty and two over fifty years.

Permit me to summarize:

1. Hip disease is a local manifestation of a constitutional disease.

2. Early operative interference is seldom justifiable.

3. As soon as softening can be determined, the surgeon should operate and obey indications, observing all care not to injure needlessly the mechanical integrity of the joint, and knowing that he is but aiding nature by removing tissue which she has already cast off.

4. In the future management of the wound, the principles of asepticism and antisepticism must be carefully observed.

5. From the earliest moment, efficient protection for the joint should be secured and constantly maintained by a well-fitting mechanical appliance.

6. Constitutional treatment is indicated as in other tubercular affections. Great emphasis should be laid on obtaining the freest exposure to sunlight and fresh air.

7. After excision a perfect recovery is never effected, the mechanical integrity of the joint having been interfered with.

8. Following mechanical and constitutional treatment, perfect restoration of function is sometimes obtained.

9. Even when softening of tissue occurs, and necessitates incision, there is sometimes a perfect restoration, and frequently a highly useful return of joint function.

12 East Bloor Street, Toronto.

## MANAGEMENT OF DIFFICULT BREECH LABORS.\*

BY ADAM H. WRIGHT, B.A., M.D.,

Professor of Obstetrics University of Toronto.

The dangers to the child in breech labors are fairly well known, but not always duly appreciated. In the most skilled hands probably 10 per cent. of the children are still-born; in some charities, we are told by Herman, 30 per cent. perish during delivery. In other words the excess in the mortality rate depending on want of skill in management sometimes amounts to 20 per cent. This is certainly a very serious matter, and is far from creditable to our modern school of obstetricians. My own experience and observation lead me to believe that many physicians neglect to use proper and systematic methods in the management of these cases. Fortunately, it happens that it is not difficult to acquire a reasonable amount of skill if we adopt certain rules in assisting delivery in breech cases. I have not time, nor any desire, to refer to all the methods which have been described by distinguished obstetricians in various parts of the world, but will endeavor to outline a definite plan of action having reference especially to the safety of the child, and for the sake of brevity will speak in rather a dogmatic way. It is generally better to explain to the friends the nature of the case and the extra risk to the child.

*Position of the Patient.*—Place her on her back across the bed, with buttocks at the edge of the bed, in the lithotomy or Waleher's position. As a general rule I greatly prefer the dorsal position for obstetrical operations, such as forceps delivery, version, etc.; but especially do I like it in breech labors. I think it equally important that the patient should be placed across the bed, and I thoroughly endorse Dürhssen's remark that "in this way alone can proper assistance be rendered." Do this in multipara when the breech enters the vagina, in primipara when it is on the point of delivery (Dürhssen).

*Preparation of Physician.*—Make bare both arms up to shoulders or as nearly so as possible, and cleanse hands and arms thoroughly. The accoucheur should be prepared to pass either hand into the vagina or uterus as speedily as possible. A 1 per cent solution of lysol is probably the best for rinsing purposes during the manipulations.

*Management of Delivery.*—Avoid traction on the child, if possible, because it generally causes extension of arms over the head, and frequently extension of the head itself. Before the expulsion of the breech instruct the nurse how to press on the

---

\* Read at the meeting of the Ontario Medical Association, June, 1893.

fundus uteri, when required, to assist in expelling the thorax and shoulders, and how to press on the head after the shoulders are born. After the delivery of the breech give the signal for patient to bear down and nurse to press on fundus. When breech does not descend into pelvis within an hour or two after the os is fully dilated, traction becomes necessary.

*Bring Down a Leg.*—Better to have patient anesthetized before all the liquor amnii has escaped. Pass up the hand with its palm towards the child's abdomen. Support the uterus with other hand over fundus externally. Seize the anterior foot if possible. "By it we can more easily pull the child downward and backward through the superior strait." When legs are extended on thighs so that feet are close to head, pass the hand to the fundus. When you reach the knee press it outward, then push the hand further, and seize the instep or foot, and carry it to the other side and bring it down.

When interference becomes necessary after the breech has descended into pelvis, it is better even then to pass up the hand and bring down a foot; but full anesthetization is desirable, and great gentleness and caution are necessary.

With reference to other methods I have but little to say. Digital traction with index finger hooked into groin, or traction with the soft fillet is sometimes sufficient, and either is quite satisfactory. The blunt hook is dangerous. The forceps is also dangerous and generally useless.

When the child is born as far as umbilicus, pass the finger into the vagina and pull down a loop of cord, but do not waste any time in trying to guide the cord to any particular part of the pelvis, as is generally recommended.

Place a piece of flannel or small blanket or diaper (sterilized) round the exposed part of the child to prevent respiratory efforts which may be induced by contact with the cold air.

*Liberation of Arms.*—The arms are nearly always dragged over the head when traction has been employed.

When the shoulders appear at vulva pass two fingers along the most easily accessible arm to the bend of the elbow, push it backward and bring it across the face to the vulva, first the elbow, then the arm, then the hand. Bring other arm down similarly. Be careful not to press on humerus for fear of causing fracture.

When the shoulders are arrested at the superior strait, an entirely different method is advisable.

Press the body of the child slightly upward and rotate sufficiently to bring the back to one or the other side of mother's pelvis; then elevate the hips toward mother's abdomen, using moderate traction, and try to liberate the posterior arm. Use the hand that naturally faces abdomen of

child and introduce until two fingers reach *elbow*. Draw arm across the child's face and then downward. Then bring hips downward and make traction on thighs as there may now be room for the head and remaining arm to emerge. If not, push child backward into pelvis and rotate the body, so that the arm that was anterior becomes posterior. During this rotation the back of the child should sweep across the front of the mother's pelvis. Bring down the second arm as before with the other hand.

During rotation be careful not to dislocate the atlas upon the axis if child be alive; but if the thorax has been pushed upward in such a way as to free the head from the superior strait, this danger is avoided.

*Normal or Dorsal Displacement of Arm.*—Very rarely the arm is extended by the side of the head, and is bent at elbow, so that the forearm lies behind the neck.

*Treatment.*—Place child's body downward and pass fingers along the back behind symphysis, seize the elbow, and then sweep the arm outward and over fetal face. Or rotate the fetal body in a direction opposite to that which produced the displacement. It may sometimes be necessary to fracture the arm.

*Delivery of the Aftercoming Head.*—In no case should the head be allowed to remain in the vagina after the delivery of the shoulders one moment longer than actually necessary. The uterine contractions have now little or no expelling force, while pressure on the cord and premature attempts at respiration at this stage are especially dangerous to the child. I employ the following methods in the order named:

1. *The Prague Method.*—Grasp the ankles with the right hand and place the left hand over the shoulders with the thumb and index finger on one side of the neck and three fingers on the other side. Pull downward and backward until head has entered the pelvis and then upward and forward, bringing the back of the child nearer to the mother's abdomen, as the face, chin first, slips over the perineum. I use the terms right and left hands for the sake of convenience. The choice of hand for each portion of the manipulation may be left to the operator. In this method the force is expended on the child's neck, and if too great, might cause dislocation or even decapitation.

In the majority of cases delivery is accomplished simply and quickly by this method, but in difficult cases where much force is required I adopt the Veit-Smellie method. I may add that British obstetricians, as a rule, consider that the Prague method should be employed only when the head is in the pelvis.

2. *The Veit-Smellie Method.*—Leave the left hand in its position over the nape of neck. Place the right arm so that

the abdomen of the child lies upon it straddle-wise. Introduce fingers, with hand, if necessary, into vagina and one or two fingers into the mouth, and pull downward on the jaw to flex head, if possible, and then apply traction to both jaw and shoulder. Matthews Duncan demonstrated that fifty-six pounds might be applied in some cases by dragging the lower jaw without appreciably injuring the parts. Let your assistant or nurse take the legs of child in one hand, and hold child as far forward as you consider necessary while she still presses over fundus with other hand.

3. *Modified Veit-Smellie Method.*—Smellie first pulled on the lower jaw as described in No. 2, but when he was afraid of overstraining it, he modified the method as follows: Remove fingers of right hand from mouth, and apply them over the superior maxillary bones on either side of nose. Pull face downward, while fingers of left hand push occiput toward the hollow of sacrum. Then employ traction. If you find that you have flexed the head to any extent, place the hands as in second method and pull. The chief advantage connected with this method is the production of flexion which was formerly insufficient to allow easy delivery. It is not likely that jaw traction does much in the way of aiding flexion, but it certainly tends to prevent extension, as Herman expresses it. When we pull, the pressure of the brim presses the parietal bones together and thus makes the vertex more pointed, while it lessens the transverse diameter. Pressure from above may prevent this moulding of head, and in some cases it is better to remove this pressure after it has been applied for some time.

4. *Application of Forceps.*—When other means have failed we may extract with forceps. Formerly this instrument was employed more frequently than now. The Smellie method is simpler and occupies much less time than the application of the forceps, while the power which may be used in the jaw and shoulder traction is, as a rule, quite as great as that which can be obtained with the forceps. This has been the experience during late years at the Rotunda in Dublin. However, it is well to have the forceps disinfected and at hand in all cases of breech labors so that it may be used if necessary. The axis traction is best. The blades should be introduced and the handles locked under the body of the child, which should be held forward by an assistant, and traction should be applied on the axis of the pelvis.

5. *Perforation.*—If forceps traction, employed for a reasonable time, fails, and the child is dead, consider the further possibility of damage to the soft parts of the mother, and use the perforator. This is seldom necessary unless there be some deformity of the head, especially hydrocephalus.

## OBSERVATIONS ON MONOCULAR DIPLOPIA AND POLYOPIA.\*

BY G. STERLING RYERSON, M.D., C.M., L.R.C.S. EMS.,

Professor of Ophthalmology and Otology in Trinity Medical College, Toronto.

Can one see double with one eye? This is a question which students sometimes ask, and it was not until my attention was thus drawn to it that I learned how really common is this condition of monocular diplopia. Another question often asked is, If a man can see double with one eye, can not he see three or more images with both? In some cases he can, as in segmentation of the lens, but generally he cannot see more than double.

For purposes of description cases of monocular diplopia may be divided into three classes: (1) Those dependent upon errors or diseases of the refractive media; (2) Those caused by diseases or injuries of ciliary body or iris; (3) Those dependent upon disorders of the central nervous system or of the nervous apparatus of the eye.

1. Of the first class, refractive errors and diseases of the lens and cornea, astigmatism, more especially irregular astigmatism, is an important cause. Opacities of and facets on the cornea similarly cause diplopia. Growths and connective tissue bands in the vitreous and segmentation of the lens are other causes. I had a patient with segmentation of the lens, who could see five moons with one eye. He saw singly with the other. Traumatic or congenital dislocation of the lens is always attended by monocular diplopia.

2. Blows upon the eye, resulting in partial rupture of the zonula of Zinn or partial paralysis of some portion of the ciliary muscle, causing irregular contraction, also produce diplopia. Other causes are trauma of the iris with peripheral detachment (iridodialysis), or following badly performed operations or synechiæ after iritis. Persistent pupillary membrane does not cause diplopia, probably because the mind has unconsciously been trained to ignore the double image by long usage.

3. The third section of my subject is best illustrated by the relation of the following cases in which monocular diplopia was dependent upon nerve disturbances:

(1) A lady, unmarried, aged about thirty, has for years suffered from right-sided facial neuralgia. A year ago she noticed that there was tinnitus and a certain confusion in hearing in the right ear, attended by abnormal acuteness, so that ordinary

---

\* Read at the Quebec meeting of the Canadian Medical Association, 1898

sounds were unpleasantly loud and loud noises painfully so. She also heard double on this side—that is, she had an echo of her own voice or other sounds. She had at the same time pain in the right side of nose, quite severe at times, attended by a feeling of strong contraction. She shortly afterwards noticed that she could see double. Investigations of this latter revealed the fact that the double vision was confined to the right eye. The double image overlapped, and according to her statement, seemed in front of rather than to one side of the real image. She had a small degree of hyperopic astigmatism. This was corrected under henotropia. There was also right-sided contraction of the field of vision. She was put on bromide of potassium and valerian. This treatment was followed by considerable improvement, but when I last saw her, a month ago, the symptoms were still persistent though in a lesser degree.

(2) My second case was that of a man, referred to me by Dr. Williams, of Ingersoll, who had met with a severe injury to the left side of his head six years ago. The injury was followed by unconsciousness lasting several days. He could not see as well with either eye afterwards, but noticed especially that his right eye was defective. Last May, following a heavy day's work on his farm, he began to see double. Examination showed that the diplopia was monocular (right eye). Ophthalmoscopic examination showed both optic nerves to be pale, with a certain indistinctness about the margin of the right disc.

So far as the causation is concerned, it can be said to depend on lesion of the base of the brain. The cause is usually inflammatory, but sometimes traumatic. It is not, however, easy to be certain as to the exact location, because basal and nuclear disease have identical symptoms. Moreover, the combinations of nerves are almost countless. A discussion of them would hardly be profitable, surrounded as the subject is with uncertainty.

It might properly be added that this subject has received but scant attention from medical writers. The majority of textbooks either ignore it altogether or dismiss it with a line. I believe monocular diplopia to be more common in neurotic cases than is generally supposed. The subject is deserving of study.



## EYE-STRAIN.

BY W. E. HAMILL, M.D., TORONTO.

Every organ in the body requires a certain amount of nerve force in order that the functions of the organ should be properly carried on, and if the nerve stimulus is interfered with or withdrawn from any organ, it results in erratic and disordered functioning of this organ, causing more or less disturbance in the whole body.

Now, the brain is the great central storehouse from which each organ in perfect health can, and does, make just demands as its needs require, in order that it may carry on its work harmoniously and in accordance with the laws of nature physiologically. There is always enough pent-up energy in the brain to furnish the needs of all the organs of a healthy body for a reasonable number of hours every day.

The demands thus made upon the brain during the active working hours of the different organs deplete the supply of brain electricity, more or less, but which is replenished again by "Nature's sweet restorer, balmy sleep." The supply of nervous force in the brain is limited, and if from any cause a greater demand is made by any organ, it robs some other or all the other organs of their fair share of nervous innervation, producing in the organs thus pauperized more or less disturbance of their natural functions. Any surplus nerve force drawn away by one organ leaves just so much less for some or all others. If we have a storage battery in the garret, which rings our door bells, lights our houses, runs the sewing machine, heats our rooms, etc., it is evident the battery would become exhausted if some tramp continuously rang the door bell, although the house might be, as it were, asleep, while the family were having a summer holiday. No unnecessary drain should be made upon the brain (battery), either awake or asleep, if a sufficient supply is to be forthcoming for the different needs as they occur.

Of course, the battery would the sooner become exhausted by leaving the lights turned on than by the ringing of the door bell, but in either case the electricity is being used up. Now, it so happens anatomically, that the eye is connected by numerous nerves (wires) with the brain (battery), and in every act of vision, "fixing" of the sight, and movement of the eye-balls, there is a supply of innervation (electricity) needed and used up, and as the eyes during our waking hours are constantly

receiving images and moving in different directions, it is plain an immense supply of nerve force is required by them every day.

The brain is quite equal to the demand, however, in the emmetropic and orthophoric eye; but supposing either ametropia or heterophoria exists, then a disturbance of the nervous equilibrium of the whole body is continuously produced, with the result that from the greater demands of the ametropic or heterophoric eye some organ of the body is likely to suffer, and hence we are not surprised to see stomach, intestinal, heart, lung, ovarian and such like troubles disappear, like dew in the morning sunshine, when the equilibrium is again restored by means of spectacles, or prisms, and the writer has seen frequent cases of obstinate dyspepsia, constipation, palpitation, asthma, epilepsy, etc., cured entirely simply by means of a proper pair of spectacles: thus allowing nature her own sweet will. Headaches are especially due to "eye-strain," and we are safe in assuming that eighty per cent. of all chronic headaches are due to some form of eye trouble, requiring glasses as the remedy, and yet how frequently the family physician, to whom these sufferers first appeal for relief, dose them with all sorts of medicine in the hope of obtaining some specific for the victim. Surely the time has arrived when every physician should recognize that persistent, oft-repeated headache should be the torchlight to pilot the patient to an oculist, instead of giving them medicine, which is not only usually inefficacious, but absolutely pernicious.

The brain in its relation to the muscles of the eye may be likened to a person driving a horse; the reins in the hands of the driver guide the animal perfectly when tractable and responsive, with scarcely a conscious effort on the part of the driver, their destination and intent being reached with a feeling of satisfaction and pleasure; but were the horse fractious and difficult of management, the driver would soon become nervous, irritable, perhaps explosive. When the muscles (reins) of the eye are too short or too long, too weak or too strong; or when the demands of the eye (horse) are unusual or irregular, the brain (driver) becomes irritated, agitated, exhausted, producing headache. The simile may be verdant, but it is apt.

# Clinical Notes.

---

## CASES IN PRACTICE.\*

BY JAMES E. GRAHAM, M.D.,  
Professor of Medicine Toronto University.

### A Case of Mucous Colitis.

Ward 4, Toronto General Hospital. September 26th, 1898.

*History.*—J. W. S., male, aged 42, married. Complained of loss of weight and strength during the last four months; inability to stand the slightest degree of cold; severe pain in the abdomen radiating from a fixed point in the median line, 4 cm. above the umbilicus, at which point the pain was most intense; excessive flatulence at times which greatly increased the pain; obstinate constipation accompanied by painful defecation and the occasional passage of mucous material mixed with blood; the pain would be greatly relieved by free purgation and by the passage of gas; poor appetite and general symptoms of dyspepsia. This pain and constipation had troubled him four times during the last four years with intervals of varying duration between the attacks when he would be free from pain but would still complain of constipation.

Two aunts and one cousin died of carcinoma of the breast. Family history otherwise negative.

Always was a hard worker. Drank moderately but was a heavy smoker. Denied venereal infection. In 1893 suffered a heavy financial loss and was very despondent for over a year. Appetite generally good but was poor during each of the attacks of abdominal pain. In 1882 a heavy timber fell across his abdomen causing great weakness of the legs for four months, during two of which he was confined to bed. Typhoid fever ten years ago. In 1894, after a severe attack of "la grippe," he was troubled for the first time with the abdominal pain and constipation accompanied by such symptoms of gastric trouble as furred tongue, bad taste in the mouth, flatulence, some vomiting and sometimes pain about two hours after taking food. This first attack lasted two months. The second attack occurred in 1896 and lasted four months. It was similar to the

---

\* Toronto Clinical Society.

first. The third came in January, 1898, and lasted until February and was soon followed by the fourth attack, which began May, 1898, and lasted until he came under observation at the hospital. The fourth attack was the most severe of all, and was accompanied by marked symptoms of gastric disturbance. In June he first noticed the passage of mucous material per rectum and after that time he observed it quite frequently. Early in September he passed several large pieces mixed with blood and fibrin. The largest piece was  $4\frac{1}{2}$  inches in length and formed an almost complete cast of the bowel. Microscopically it was a structureless membrane containing blood and fibrin. No traces of malignant growth were found. He entered the hospital September 26th, 1898. Physical examination was negative. The colon was inflated and showed that the point of severest pain was in the course of transverse colon. The treatment was directed towards securing free purgation. Large doses of magnesium sulphate and enemata of soap and water, oil, glycerine, and magnesium sulphate. The resulting looseness of the bowels relieved the pain considerably and he left the hospital October 17th.

The patient was seen two weeks after he left the hospital, when he stated that a few days after he went home he passed another mucous coat of the bowel about four inches in length. He has since been quite well.

(Reported by Mr. Tanner.)

#### A Case of Meningitis due to Primary Pneumococcus Infection.

Ward 24, Toronto General Hospital. October 27th, 1898.

*History.*—Harold H., aged 10. Family history not obtained. Always was a bright child. One year ago he fell off a ladder and received a fracture of the skull on the right side above the parietal eminence. Paralysis of the left arm and leg followed. The paralysis was complete for some months but afterwards there was a gradual improvement which was more marked in the leg than in the arm. For a month previous to his admission to the hospital he seemed nervous and fretful but this was attributed to grieving over the death of a near relative. He felt unwell on Sunday, October 23rd, but this condition was only temporary. On Wednesday he became rapidly prostrated and complained of severe pain in the head and back of the neck; severe and frequent vomiting. During Wednesday night a condition of muttering delirium set in and continued until his death. He was admitted to the hospital on Thursday, October 27th. Temperature, 97; pulse, 80; respirations, 22; unconscious; low muttering delirium; nutrition fair; cross-shaped scar, 4 inches by 2 inches, with long axis in antero-posterior

direction, just above right parietal eminence; head turned towards left side and moved with difficulty; right side of face depressed, left side prominent; eyes closed, pupils dilated, right larger than left; divergent strabismus; no apparent discharge from the ears; mouth open; tongue dry and rough; lips dry and caked; respirations irregular both in volume and in rhythm but respiratory system otherwise normal; heart sounds faint and pulse weak; abdominal organs apparently normal; bladder distended, contained eighteen ounces which were drawn off by catheter; urinary examination negative; left arm flexed at the elbow, fingers flexed; left forearm extended with difficulty; right arm flaccid; legs flaccid; no glandular enlargements; reflexes—eyes, no pupillary reaction to light, no corneal reflex; legs—knee jerk absent on right side, variable on left side, generally absent but occasionally exaggerated; plantar and cremasteric slight on both sides; ankle clonus not obtained; examination of eyes by ophthalmoscope, no optic neuritis, but such a condition might have been beginning; veins dilated. The diagnosis was cerebral inflammation in the neighborhood of the depressed skull or meningitis extending from the seat of injury. The head was shaved and prepared for trephining on October 28th, but the boy died at 3 a.m. that day. There was a gradual rise in the temperature and pulse up to the time of his death. His temperature was  $99\frac{2}{3}$  at midnight and 101 at 3 a.m., while respirations were 8 per minute.

*Autopsy.*—The chief interest was in the brain and membranes. The scalp was strongly adherent to the skull over the scar and internally the dura mater was also adherent. The skull was larger than normal for a child of ten years, and the bone was very thin. There was no depression of the inner table, only a slight thickening and roughening. The dura mater was roughened and thickened immediately beneath the scar. Over the whole cortex on both sides and about the cerebellum and medulla the arachnoid mater and the pia mater were congested, edematous and thickly infiltrated with thick yellowish-white pus. There was no apparent destruction of brain tissue on the right side beneath the scar. Spinal cord was not examined. There were numerous sub-pericardial hemorrhages in the heart. The blood was dark and fluid. Lungs normal. Peyer's patches and the solitary follicles of the intestine somewhat enlarged.

*Bacteriological Examinations.*—In smears made at the autopsy from the pus and heart blood the pneumococcus was the only organism seen. Cultures from the pus and blood resulted in the growth of the same organism. The organisms in the smears were diplococci, encapsuled, and retained the stain when treated by Gram's method. Injection of the cultures into

the peritoneal cavity of a rabbit resulted in the animal's death after 48 hours with localized pus formation and organisms in the blood similar to those seen in the smears.

(Reported by Mr. Tamer.)

### Staphylococcus Infection.

M. B., aged 34, bookkeeper, was first seen by me on October 24th, when the following history was given: The patient went to Chicago for his holidays and after spending two weeks in that city returned to the neighborhood of Hamilton where he visited his former home in the country. On Thursday, October 13th, he helped to pull up roots (mangel-wurzel) in the field, after which he complained of a pain and slight numbness of the left hand. His mother had previously noticed a peculiar restlessness and did not think he was well. On Saturday, October 15th, the pains and numbness became more pronounced. These symptoms together with loss of power increased until the following Wednesday, October 19th, when he went to his home in the northern part of Ontario. His wife met him at the station and did not think he was seriously ill. He complained of the pain and loss of power of the left arm. On Thursday he felt worse and a physician was called in. On Sunday he was noticeably weaker and his breathing became more rapid. He slept very little on Saturday or Sunday night. The pain was not severe but the patient was restless and walked about the room the greater part of the time. He came down to Toronto on Monday and was much fatigued by the journey.

At eight o'clock in the evening the patient was seen by the writer. He was in bed—face flushed, and although he replied intelligently to questions, a certain amount of heaviness was noticed. The conjunctivæ were congested and the pupils responded to light. The tongue was partially coated and the bare spots were quite red. The mucous membrane of the pharynx was red but there were no white patches to be seen.

The patient had great difficulty in swallowing and made gestures very similar to one suffering from quinsy. Swallowing did not give him pain but a strong effort was required to accomplish the act. His left arm was almost completely paralyzed, but he had some power over the shoulder muscles. He could use his right hand and arm fairly well, but complained of more or less pain and numbness in that extremity. He turned over in bed with great difficulty and paralysis of the muscles of respiration was then noticed. The respiration was 40 in the minute, and so shallow that it was difficult to hear any breathing sounds. The diaphragm was paralyzed to the same extent as the muscles of the chest walls. The heart

sounds were clear and the first sound had somewhat of a booming character. No bruits could be heard. The abdomen was slightly tympanitic. Bowels constipated. The lower extremities were weak but he had fair control, and with assistance had walked to his room in the second story that afternoon. Temp. 102; respiration 40; pulse 120, 9 30. At 10.30 I was hastily summoned and found the patient dead. The nurse stated that the same condition as has been described continued until a few seconds before death. She was about to give him a drink when he suddenly expired. The writer had intended to make a more accurate examination of the muscles, as to electrical reaction, etc., on the following morning.

At the autopsy the right lung was firmly adherent at the apex, posteriorly and to the diaphragm, there was slight adhesion of the left apex. The blood was very dark and fluid throughout the body. Heart muscles were flabby but of good color. The spleen was enlarged and very soft. The kidneys showed intense congestion, swollen cortex and a slightly adherent capsule. The liver was very soft and of a pale greyish color. The other organs apparently normal. On both sides of the brain the arachnoid and pia mater, from the fissure of Rolando back to the middle of the occipital lobe, were swollen and showed white edematous patches. The membranes came away from the brain matter readily. No pus in the white patches. Base of the brain, medulla, pons, and the upper inch of the spinal cord apparently normal. The rest of the spinal cord could not be examined unfortunately. The large nerve trunks in the left brachial plexus showed the pressure of many minute hemorrhages. On either side of the epiglottis there were enlarged lymphoid-looking patches varying in size from a pin's head to a bean. Cultures were made from the heart blood, spleen and kidney and a pure culture of the staphylococcus pyogenes aureus was obtained. These cultures produced localized abscesses in rabbits in 36 hours from which pure cultures of staphylococcus pyogenes aureus were obtained. No abscesses were found in any part of the body although a careful search was made. The appendix was quite healthy.

## NOTES ON APPENDICITIS IN CHILDREN.

BY F. MARTIN, M.D., DUNDALK.

CASE 1.—William A., aged twelve years. On September 26th rode to town ten miles, walked into office in a semi-erect posture, face sallow, drawn and anxious. Had been constipated several days. Shooting pains in abdomen, temperature  $102.8^{\circ}$ , pulse 129, tenderness in right iliac fossa, very marked in McBurney's point. No tumor could be felt either externally or by rectum. Ordered "rest, opium, enemata," with hot applications in groin. Received favorable reports daily for ten days, when he commenced to strain a great deal at stool after the injections. On October 7th, a small tumor could be felt low down on the right side externally. On examination by rectum a lump about the size and shape of the bottom of an ordinary teacup could be felt a short finger's length above the sphincter. After exploring with a grooved needle this was freely opened through the rectum and at least a pint of very offensive liquid pus evacuated. From that date the patient was practically well.

CASE 2.—S. W., aged fourteen years. October 22nd, vomiting, pain in right groin, right thigh flexed, temperature  $101.2^{\circ}$ , pulse 110, tenderness and dulness over a sausage-shaped tumor in right iliac fossa. Same treatment as in Case 1. October 26th commenced to strain at stool after injections. A tumor resembling the bottom of a pepper bottle could be felt per rectum; exploring this on two successive days no pus could be found. The acute symptoms all subsided, and on the 31st, after an injection, considerable pus was passed by the bowel, which continued for several days, and an uninterrupted recovery was made.

CASE 3.—H. R., aged ten years, male. On October 29th took a chill, retained nothing in his stomach for twenty-four hours following. On 31st, when first seen, temperature  $101.4^{\circ}$ , pulse, 134, tongue furred, pain and tenderness in right fossa, no tumor found either externally or by rectum. On the next day a lump could be detected which steadily increased in size for three or four days until the lower limit could not be made out, and the upper was within a finger's breadth of the liver, dulness, when, notwithstanding the strong condemnatory paragraph by Treves, I explored it twice with a hypodermic needle with negative result. On the seventh day of his illness, feeling confident that pus was present, and the patient's life threatened, with the assistance of an older practitioner, I explored again, this time with a fair-sized aspirating needle under full



anesthesia, at the same time being prepared to operate. A very slight trace of pus being found, my consultant strongly advised against operation. His advice was followed, and the patient commenced to improve from that date, and at the present writing is comparatively well with the exception of pains in his limbs and vertigo at times.

CASE 4.—W. R., male, aged ten years. Took ill on Wednesday with pain in the bowels. On Saturday a distinct tumor could be seen in right iliac fossa, which subsided in a few days. On the following Tuesday (seven days after the onset) pus was obtained by a hypodermic needle passed through the sixth or seventh intercostal space in the right nipple line. Thinking the case clearly one of empyema a tube was inserted through one of the lower intercostal spaces at the back with a negative result. Without any marked change the patient lingered, and died in the seventh week of his illness. I saw the case in consultation late in the course of the disease, and considered it one of hepatic abscess.

At the post-mortem the appendix was found to be completely obliterated, the cecum and neighboring bowel gangrenous so that they could not be handled without rupture. An old, but distinct, track of pus, with limiting adhesions, could be traced up behind the colon, behind and up over the right lobe of the liver to a depression upon its upper surface about the size of a hen's egg. Fully half a gallon of pus was found free in the abdominal cavity. The pleural cavity was normal.

We read a great deal nowadays in our journals as to when to operate. While there is a strong probability that timely operation would have saved life in Case No. 4, would it have been justifiable in any or all of the other three?

# Society Reports.

---

## TORONTO CLINICAL SOCIETY

The forty-ninth regular meeting of this Society was held in St. George's Hall, Elm Street, on Wednesday evening, the 21st ult., Dr. F. LeM. Grasett presiding. Fellows present: Chambers, J. A. Temple, Allan Baines, Geo. A. Peters, H. J. Hamilton, A. A. Small W. H. B. Aikins, J. O. Orr, Badgerow, Leslie, Spencer, Harrington, Geo. Elliott, Rudolf, Parsons, Fenton, C. Murray, Primrose, Britton and Thistle.

### Facial Spasm.

Dr. H. J. Hamilton presented a case of facial spasm for Dr. H. B. Anderson. An informal discussion was taken part in by Drs. Temple, Baines, Grasett, Peters and Chambers.

### Phosphatic Calculus.

Dr. Geo. A. Peters showed a phosphatic calculus weighing one ounce, and described the case; another calculus with nucleus of oxalate of lime, and a phosphatic covering; also unique device composed of a horse-shoe and plaster-of-Paris, for cutting calculi. The cases were discussed by Dr. Grasett and Spencer.

### Uric Acid Calculi.

Dr. Spencer showed three uric acid calculi the size of peas, voluntarily passed per urethram by man aged seventy years.

Dr. Peters in discussing these thought they might have formed in a sacculus of prostate gland, and doubted their being uric acid.

### Estlander's Operation.

Dr. Primrose presented specimen, portion of thoracic wall removed from patient with chronic empyema.

Drs. Spencer, Parsons, Rudolf and Britton contributed brief discussions.

GEO. ELLIOTT,  
*Secretary.*

# Editorials.

---

## OUR SALUTATORY.

THE CANADIAN PRACTITIONER AND REVIEW now appears for the first time, and is the result of an amalgamation—pure and simple—of two strong medical journals previously existing. As to the form of the present journal we have endeavored to accommodate ourselves to the views of many of our friends, including such as “a reader of twenty-four years” of the older of the former journals. We do not wish, however, to sink the identity of either in the fusion, which does not happen in any sense to be an absorption of one on the part of the other.

Our main effort will be to attain a high standard from a literary point of view; and for that reason we appeal to our friends, wherever they may be, to assist us by contributing freely to our columns of original matter. We ask not simply for papers on medical subjects, but also for reports of cases in practice.

As to general policy, our chief desire will be to publish a journal for general practitioners in medicine, and not for any cliques or parties—if such exist. We believe that it will be generally admitted that medical partyism in various spheres is either subsiding, or growing less acrimonious. In the Province of Ontario and in the city of Toronto there seems to be a tendency for certain parties who opposed each other strongly some years ago to come closer together, and to work better together for the good of our profession at large. We will gladly support and encourage those who are working on these lines.

Our legitimate circulation will be large—we think we can fairly say, at least as large as that of any other medical journal published in Canada. This will be quite as satisfactory to our regular subscribers as to our advertisers, although the latter may take a more engrossing interest in this aspect of our position. Even advertisers, however, are becoming suspicious as to the worth and influence of purely advertising journals.

For the many kind expressions of approval of the amalgamation on the part of our contemporaries, and for the vast number of congratulations received from our friends in divers places we desire to return very sincere thanks.

---

### LA GRIPPE.

La grippe, or influenza, is more or less prevalent in all parts of this continent. It was estimated that there were one hundred thousand cases in New York, December 20th, and the health commissioners of the city have formally declared the disease both contagious and infectious, and have requested physicians to report their cases, and keep their patients isolated as much as possible.

There can, of course, be no doubt that influenza is infectious in the highest degree, and frequently spreads with extraordinary rapidity. We noticed this especially in the severe epidemic of 1889-90. It prevailed extensively in St. Petersburg, in October, 1889, and, travelling west, swept over Europe, and reached England in December. In the latter part of the same month it reached this continent, and its ravages continued during January and February of 1890. The disease is said to be endemic in the eastern portion of Russia and Central Asia, and all our severe epidemics have come from that locality. In fact, the disease is known in some parts of Europe as the Russian fever.

The present epidemic is not very severe, so far as we know, at the time of writing, although there have been some deaths from what is known as grippe pneumonia. In such cases, however, the pneumonia is probably not a part of the disease itself, but rather a complication. It is frequently difficult to decide as to isolation. It is no trifling matter to properly isolate a patient, and in mild cases so much trouble seems to most people unnecessary. When in doubt it is better to recommend isolation, and let the friends of the patient, if they object to the inconvenience of such procedure, assume full responsibility in the matter.

## GIFTS FOR SCIENTIFIC AND EDUCATIONAL PURPOSES.

In recent years it has become quite the fashion to both give and bequeath large sums of money for scientific and educational purposes. Stamford, Johns Hopkins, Cornell and other universities in the United States are examples of institutions with endowments running well up in the millions, due to the generosity of wealthy citizens. The fashion or epidemic struck Montreal some years ago, and as a result many millions have been given to educational institutions and hospitals in that city. Among the most generous have been Lord Strathcona, Lord Mount Stephen, Sir William Macdonald, the Molsons and others. Sir William Macdonald received his knighthood last month, chiefly, or altogether, as a reward for his generosity in this direction. He was born in Prince Edward Island in 1833, and commenced business in Montreal in 1854. His gifts to McGill University amount to \$1,650,000, distributed as follows: \$20,000 to the Thomas Workman Endowment for mechanical engineering; \$350,000 to the W. C. Macdonald engineering building and endowment; \$40,000 for a chair of electrical engineering; \$300,000 to the Physics building; \$90,000 towards the endowment of two chairs of electrical engineering; \$150,000 to the faculty of law; a further sum of \$150,000 for the maintenance of the engineering building; \$50,000 to a pension fund; \$500,000 to the latest building for the departments of chemistry, mining and architecture, and the endowment of a chair of mining engineering.

A few days ago an announcement was made in England by Lord Lister and Sir Henry Roscoe of a princely gift of \$1,250,000 to the Jenner Institute of Preventive Medicine by Lord Iveagh, formerly Mr. Edward Cecil Guinness, the head of the great Guinness firm in Dublin. The purpose of the gift is to promote research in bacteriology and other forms of biology as bearing on the causes, nature, prevention and treatment of disease. It is confidently expected that this gift will enable the Institute to compare favorably with any similar institution in the world, and will remove from the British Isles the reproach that their opportunities for research directed towards the prevention of disease are not equal to those of other nations.

## THE CRUSADE AGAINST TUBERCULOSIS IN ENGLAND.

We have already referred to the crusade against tuberculosis in Great Britain, which has been largely due to the efforts of Malcolm Morris, the able editor of *The Practitioner* (English). The June issue of this great medical monthly magazine was devoted entirely to a consideration of tuberculosis and its ravages, especially in England and Wales. The Editor again refers to the subject in the December number, in an article from which we extract the following paragraphs: "The crusade against tuberculosis, which was first preached by *The Practitioner*, has been entered upon with an enthusiasm beyond my most sanguine hopes. The medical journals are full of it. At meetings of medical societies in town and country a paper on the open-air treatment of phthisis is pretty sure to be among the communications presented. In every presidential address the subject comes up as unfailingly as the head of the 'Royal Martyr' in Mr. Dick's Memorial. . . . The medical profession is evidently beginning to realize that consumption is not only preventable but curable, and, in spite of the sniffings and shruggings of superior persons, it is everywhere joining in the movement. The public is also becoming aroused to the importance of the matter, and, what is still more satisfactory, municipal and other local authorities are not only sympathetic but active in support."

We are also making some progress in the right direction in Canada, but our municipal bodies are moving somewhat slowly. We have our excellent sanatorium at Gravenhurst, which has been a boon for a limited class of consumptives, but has not thus far been available for these unfortunate victims of tuberculosis who are unable to pay for treatment. The Council of Toronto has been urged by the profession of the city to take certain steps towards the establishment of a sanatorium for our sick poor consumptives, but is slow in responding in a satisfactory manner.

# Progress of Medical Science.

## MEDICINE.

IN CHARGE G. W. H. B. AIKINS, J. E. GRAHAM, J. FERGUSON, T. McMAHON,  
H. J. HAMILTON.

### Fear Neurosis.

Dr. Morton Prince, in the *Boston Medical and Surgical Journal* for December 22nd, offers some careful observations of a condition which he calls fear, or phobo-neurosis, rather than phobo-psychosis. He claims that this is a distinct neurosis, and that it has never as yet been described. The reason why this neurosis has been overlooked is because it has been regarded merely as a manifestation of timidity. But, while it is quite true that it arises from timidity, or self-consciousness, yet it persists long after all timidity has passed away as an automatic affection. He points out that, though the symptoms are the natural physical manifestations of fear, they are not accompanied by this emotion. The condition exists apart from any psychical state as a group of pure physical symptoms.

At first there is a natural or excessive timidity. In this timid condition certain environments excite fear and its accompaniments, such as tremor, palpitation, faintness, etc. By constant repetition of this excitement, these symptoms become welded together into an automatic process, which persists as habit neurosis. This must be regarded as a sort of degeneration of nervous process by which associated actions become grouped together. This is a process by which certain arts are learned, as violin playing, etc., and certain morbid states are developed, as some of the neuroses and psychoses.

After the condition of this neurosis has been well developed the exciting cause of any individual attack is some primary suggestion in the form of apprehension, or expectation that these symptoms will repeat themselves. To this there is usually added the direct excitant of making some public appearance.

There is a feeling of being watched, faintness, perspiration, flushing of the face, confusion of thought, depression, a sense of indigestion, a feeling of goneness, an ataxic feeling in hands and feet, dryness in the throat, coldness in the hands.

These feelings and symptoms become so organized that the fear of their recurrence renders it impossible for some singers,

musicians and public performers to appear before an audience. The thought that they are going to perform will bring on the whole train of symptoms, and render them unable to go on with their practice.

These symptoms may complicate a true condition of neurasthenia, but may exist by themselves as an independent neurosis. The symptoms are often of such intensity as to be a matter of considerable suffering. They come on with such suddenness as not to allow for thought. At a time when the person is lecturing, playing, practising, or so on, these feelings come on with a rush. To continue with the performance under these conditions calls for the utmost exercise of will power, and this in turn is very exhausting.

The knowledge of the possible return of these symptoms at some critical moment depresses the person. This intensifies the neurosis. Actual suffering results from this in the form that the persons think they are regarded as timid when they are really not so.

#### Myxedema and Allied Disorders.

Dr. William M. Ord, in the Bradshaw Lecture (*Brit. Med. Journ.*, November 12th), reviews the present state of our knowledge on this disease.

The first thing to attract attention is the condition of the skin, which undergoes very important changes in its surface and in its glands. The skin becomes greatly thickened, and there is a marked increase in the subcutaneous tissue. The mucous membranes undergo changes resembling those in the skin. It is a matter of special note that the thickening and œdema are not of a dropsical nature. There is no tendency to gravitate toward the dependent portions, nor to pit on pressure. The skin is everywhere dry, and in many places is much thickened in the epithelial and dermal layers.

There is a remarkable change in the expression of the person. The skin over the cheeks and forehead is dry, thickened and translucent, but firm to the touch. It has much of the appearance of one ill with acute Bright's disease; but there is an absence of pitting on pressure. Eyelids droop, and are raised by the elevation of the eyebrows. The lips are so swollen as to destroy all expression. The ears are very much enlarged and thickened. The whole face wears the appearance of a sorrowful mask.

The thyroid glands present an enlargement on each side of the neck. These are likened sometimes to lumps of dough. The lecturer states that they feel more like a large ripe tomato under the skin. These lumps are made up of fat, changed connective tissue, dilated veins. These enlargements are charac-



teristic of sporadic cretinism. The hands become broad and unshapely. They were likened by Sir W. Gull to spades.

One of the early symptoms of the disease is a dry, brittle condition of the hair. This atrophy of the hair goes on until it completely disappears over the entire body.

The mucous membranes swell. In the mouth the cheeks press against the teeth, and the inner surface of the lips become much thickened. The tongue is large and anæmic. The gums are swollen, and yet recede from the teeth. They tend to ulcerate and bleed.

The nervous system undergoes some very characteristic changes. Tactile sensation is very much diminished. This is most marked in the fingers, which lose mobility as well as touch. In some cases certain portions of the skin lose all tactile capacity.

The muscular system becomes much weakened. The least exertion produces extreme exhaustion. The muscles become quite tremulous on making any effort. They become so weakened as to be unable to support the head in some instances.

The speech is of a most characteristic kind. It is nasal and lethargic. The words seem to stick at the lips. The patients, in their efforts to speak, make writhings with the upper lip. The words are often ejected with a sort of explosive jerk. In spite of the slowness of speech, there is a strong desire to talk, and many of these patients would talk for an hour continuously in a monotonous manner.

The mind undergoes important changes. In some cases it is lethargic and placid. Generally, however, the mind becomes suspicious. This suspicion generally takes on the form of thinking that the sufferer is being watched and unfavorably criticised. This may so irritate the patients as to make them violent. There may be a tendency to suicide arising from this frame of mind. Sometimes they bemoan their lot, as they think they have done some evil, or that some malignant influence haunts them.

The temperature is usually reduced. From 1° to 3° F. is the amount of the reduction in typical cases.

There is a strong tendency to hemorrhages. From the nose, from the extraction of a tooth, and post-partum are common forms. The most serious is apoplexy.

Myxœdema and sporadic cretinism are attended by changes in the thyroid gland. In the early stage this may be enlarged, and there may be a period when the symptoms are like those of Graves' disease. In typical cases the gland is atrophied. The secreting structures are replaced by connective tissue. The secreting power of the gland may be destroyed with an enlarged condition, owing to overgrowth of adventitious tissue.

In cases where the gland has been removed, that of strumipriva, the same general conditions are found.

The general and special treatment are well known. Warmth is very necessary. For this purpose, change to a warm climate is very helpful. Thyroid preparations are the specifics in the disease. Sometimes thyroid is administered in the form of glycerine extract, ℥.xv. or xx. every day or other day by hypodermic method. At other times the raw gland is fed to the patient, or some solid extract as in some of the tablets on the market. Great care is required not to push a good thing too far, as the patient may be made very ill. Too free use of the thyroids may cause fever, nausea, headache, palpitation, etc.

### Diseases and Their Treatment.

Dr. Wm. Ewart, in his Harveian Lecture (*Brit. Med. Journ.*, December 10th), refers to some very important topics. Among them may be noted the following:

One of the most important facts that the general practitioner has to bear in mind is the limitation of disease by sanitation and preventive medicine. The field of the general practitioner is also greatly narrowed by the increasing number of specialists, into whose hands many of his patients drift, and he loses exclusive control over them.

The spread of knowledge regarding the early detection of disease has done much to lessen spread by infection. Through the aid of bacteriology much advance has been made in etiology and, consequently, in prevention. By the discovery of Jenner, it has been shown how diseases of certain kinds may be stamped out altogether.

The advance in hygiene, having its origin in a knowledge of contagion, has been enormous. Typhus, typhoid fevers, cholera, the exanthems, the plague, septic diseases and puerperal fever have been almost stamped out, or very greatly controlled. Diphtheria has yielded, to a very large extent, to the antitoxin treatment. Other efforts in the same direction hold out much promise. The brilliant advances made in surgery tend to eclipse those made in medicine, and yet the arrest of a single disease such as typhus, cholera or small-pox, saves more lives than all the work of surgery put together.

The field of phthisical diseases is now the one of most need for attention. The progress made already is very gratifying. Much has been done to save life. In this disease there are two infections to study, that of the specific germ, and the accompanying septic germs. The great remedy for this disease is that of prevention.

Disease cannot be wholly abolished. There must ever be those of childhood, puberty, maternity and the accompanying

gynecology, the climacteric, accidents and old age. Diseases arising from dietetic errors are likely to remain with us. The large and important group of degenerative diseases in the renal, vascular and nervous systems are inseparable from the advance in age of the human body. The conditions of modern life are held to increase cancer, insanity and nervous diseases.

Much good has been done in the direction of securing better and purer foods, and the inspection of meats and milk. On the other hand, new drugs are being introduced that threaten to give rise to many cases of habituation. The unskilful use of condensed milk and babies' foods has been productive of much disease and suffering to infants.

Tropical diseases are now becoming of much importance. In these days of rapid travel, there is much risk of the importation of epidemics of high mortality and active contagion.

### Sanatoria for Consumptives.

Dr. J. M. Anders, in the *Therapeutic Gazette* for December, 1898, deals, in his usual scholarly fashion, with the above topic. He claims that the progress of scientific research and clinical experience for the past twenty years have been bringing thoughtful men to regard the hospital and sanatorium treatment of consumptives with favor. This change in opinion is the outcome of much observation, discussion and writing upon the subject. This disease is one of the greatest afflictions of the human race, and every means of arresting its spread is desirable.

He states that to England belongs the credit of having first established hospitals for the treatment of consumptives. The good work done in Britain by the hospitals is enormous. During the last forty years the death rate has been reduced 50 per cent. This has been brought about by the isolation on the one hand and by the knowledge that is spread in this way throughout the population that the disease is infectious. In England and Wales, per 1,000,000 of the population, the death rate is as follows: 1870, 2,410; 1875, 2,202; 1880, 1,869; 1885, 1,770; 1890, 1,682; and in 1895, 1,468. A close observer states that since 1870 the death rate from consumption has decreased by 39 per cent. in England, and by 36 per cent. in Scotland.

In Philadelphia the deaths from this disease have been decreasing, since 1870, at the following rate per 1,000: In 1870, 3.42; 1880, 3.17; 1885, 2.97; 1890, 2.64; 1893, 2.39; 1894, 2.20; 1895, 2.10; and 1897, 1.96.

A very notable fact is to be found in the experience of some large cities where the death rate rapidly decreased after the establishment of suitable hospital accommodation for consumptives.

It has been fully settled, especially by the researches of Arthur Ransome, that tuberculosis clings with great persistency to private dwellings. In this way the disease is spread.

In the sanatorium in the Adirondacks, by Dr. Trudeau it is claimed that about 20 per cent. are apparently cured, and that in 30 per cent. more, the disease is more or less arrested.

Another fact that becomes very apparent upon a study of the disease, is the heavy death rate from it among the poorer classes. This arises from bad housing, poor food and lack of sanitary care, and from direct infection owing to those afflicted sleeping and living with those who are still free from the disease. It is for these cases that hospitals are of the greatest importance.

### Gastrostomy and Curettement of Carcinoma of the Cardia.

At the last annual meeting of the British Medical Association, held in Edinburgh, July, 1898 (*Brit. Med. Journ.*, November 19th, 1898), Dr. Fenton B. Turcke, of Chicago, described his new method of operation for gastrostomy, and also an operation for curettement of carcinoma of the cardia. His operation for gastrostomy consists in reaching the stomach by the direct method, using folds of the stomach wall to act as valves or sphincters.

The preliminary incision is made and the external wall exposed with the usual antiseptic precautions. A fold is then made in the anterior wall of the stomach from above downwards and fixed by three stitches. A suture is passed through the wall of the stomach at the lower margin of this fold and threaded through a perforated trocar. The trocar and cannula are then held across the fold transversely. The fold is stitched around the cannula, and another fold taken up from below and stitched over this, forming a ring which is next sutured to the peritoneum and rectus fascia. The trocar is now thrust through the wall of the stomach and withdrawn, together with the thread which passed through it and acted as a guide. Then the cannula is left in place and the wound closed around it.

The advantages claimed for this operation are that it takes only a short time to perform it; that it occupies a less extensive space in the anterior wall of the stomach than most of the other operations in which the stomach is entered obliquely, and that it makes the most perfect valve, preventing any possible escape of stomach contents.

Dr. Turcke claims priority over Senn and Fontan, who in 1896 described methods of producing a valvular opening "similar to the ileo-cecal valve," having first devised his method in 1895 and published a description of it in the *Medical News* of April 4th, 1896.

For curettement of carcinoma of cardia Turcke has devised an instrument which may be described as a cone, with narrow knife edges set at an acute angle upon its sides. In suitable cases this is inserted into the abdominal wound, and the constricted cardiac orifice reached and burred out, so to speak, by attaching the broader end of the instrument to a revolving stem, thus increasing the calibre of the orifice.

[*Remarks.*—While conceding the advantages to be derived from the method of operation for gastrostomy, we confess our inability to determine the cases in which curettement would be either safe or useful. The latter must in all cases be fraught with so much danger that none but the most daring would ever attempt it.]

### Thrombosis of the Mesenteric Veins.

Koester (Abstract in *Medical News*, from *Deut. med. Wochensch.*, May, 1898) puts on record three cases of thrombosis of the mesenteric veins—a rare affection and one about which little has been written. The resulting gangrene in one case affected the large intestine, and in the other two a part of the small intestine. The symptoms were similar to those of a case of embolism of the mesenteric artery, also reported by Koester. All the patients died. If operation was attempted it was seen to be hopeless as soon as the belly had been opened. By comparing the symptoms in these cases with those of the ten previously recorded cases, it is possible to draw a fairly clear picture of the disease. The patient may be attacked suddenly in perfect health, or he may be recovering from some severe illness. There is invariably intense abdominal pain with vomiting, and often stoppage of the bowels and collapse. The abdomen is extremely tender, and if the patient outlives the shock, tympanitis follows. In a few instances there has been bloody diarrhea. Death is not long delayed. Sometimes it comes in a few hours. In one case it was delayed for three days. . . . The diagnosis is not to be made with certainty during life. The affection can readily be confounded with acute ileus, or a perforative peritonitis, or even with an invagination."—*From Quarterly Med. Journ.*

[I saw a case of this kind. Dr. Ross operated—found the condition. Man died.—F. M.]

### Diphtheria Antitoxin.

Dr. F. Gordon Morrill (in *Univ. Med. Mag.*), visiting physician to the Children's Hospital, of Boston, as a result of his observations and researches upon the immunizing power of a single injection of diphtheria antitoxin, recorded in the *Bos. Med. and Surg. Journ.*, concludes :

"1. That immunity in any given case, of no matter how thorough exposure to diphtheria, may be conferred, for at least ten days, by the injection of a small dose (100-250 units) of serum, provided it is given twenty-four hours previous to actual infection.

"2. That a larger dose (250 units for a child of two, up to 500 units for one of eight or over) will confer safety for three weeks—or to be a little more conservative, let us say twenty days—under similar conditions.

"3. That no harm will result from the treatment in a vast majority of cases of *sick* children, and probably in no case of a healthy child provided the serum used is up to the present standard of purity.

"In conclusion, I would say that any one who thinks that antitoxin will prevent the occurrence of a follicular tonsillitis or of a coryza in an individual who happens to have the Klebs-Löffler bacillus in his throat or nose will be disappointed; for neither of these conditions constitutes a diphtheria any more than the coexistence of the pneumococcus in the saliva and a bronchitis constitutes a frank pneumonia. I will add that a physician who fails to promptly immunize the members of a family or close community in which diphtheria breaks out, neglects to do his duty by those whose safety lies in his hands."  
—*Clinical Review.*

### Weil's Disease.

Leick (*Deut. med. Woch.*) reports a fourth case from the Greifswald clinic. The four patients were all engaged on the same estate, and attributed their illness to contaminated food, with the exception of the last one. The author draws attention to the fact that during many years the only cases of Weil's disease have come from this one place, and have occurred within the last two years. In the present case a man, aged 28, was seized with vertigo, and a feeling of prostration, with pains in the splenic region. A few days later there was jaundice, loss of appetite, thirst, and diarrhea. On the fourth day vesicles appeared on the lips, and there was marked epistaxis. Delirium occurred, especially at night. On admission, there was marked jaundice, as well as petechiæ scattered over the body. Temperature 31.2° C.; pulse, 112. The spleen was distinctly enlarged, and the urine contained a little albumen. Under treatment, mainly dietetic, the temperature gradually fell, and the other symptoms diminished. The pulse fell to fifty beats a minute. Convalescence was slow and interrupted. On the nineteenth day after the onset there was a relapse, the fever lasting several days. The illness presented all the characteristics of Weil's disease, including the tenderness over the

liver and the muscular pains. The etiology is very obscure. Bacteriological and other examination of the blood was negative. The author vigorously opposes the view that Weil's disease is really enteric fever complicated by jaundice. Widal's reaction is absent. He looks upon it as a disease by itself, of which the specific infective virus is as yet unknown.—*Brit. Med. Journ.*

---

## SURGERY.

IN CHARGE OF EDMUND E. KING, HERBERT A. BRUCE AND L. M. SWEETNAM.

### / Injections of Saline Solution in Shock.

W. Thelwall Thomas, F.R.C.S. Eng., has a very interesting article on this subject in a recent issue of the *Lancet*. When an animal is killed by bleeding, all the blood does not escape, yet the animal dies. The quantity remaining in the tissues, although containing a large number of blood cells, is of no use, because it ceases to circulate, a small stream being unable to travel by reason of the great inequality between its size and that of the large vessels. The heart has little or nothing to contract upon, and even if a little blood gets into the large arteries, the vessels cannot pass it along. The more sudden the loss, the quicker the collapse and death; the slow loss of blood allows time for transudation of fluid into the vessels from the tissues. . . .

Goltz recognized the salient fact that death from loss of blood was really due to loss of liquid from the vascular system, and that any suitable solution—*e.g.*, saline solution or artificial serum—would do for injection.

Dr. William Hunter . . . showed that (1) the immediate source of danger from sudden loss of blood is the rapid fall in blood pressure; (2) that the value possessed by transfused blood is almost solely physical and dependent upon its volume; and, lastly, that all the advantages of transfused blood can be more readily and safely obtained by the use of simple saline solution . . . normal saline solution, six parts of sodium chloride to one thousand parts of sterilized water. . . . The emergency method of dissolving a teaspoonful of common salt in a pint of water . . . is near enough.

The fluid may be injected by pressure into the cellular tissue, under the mammary gland, in the groin, or in the axilla, . . . but all these methods are only serviceable when circulation is proceeding and absorption possible, and are of necessity slower in their action than injection into the veins direct. *In extremis* nothing short of salt solution directly into a vein is of any use. For this purpose the apparatus generally used by me consists

of a glass syringe (capacity four ounces), two feet of rubber tubing, and a curved metal cannula to fit a vein of the size of the median basilic vein. . . . The piston is withdrawn and the whole apparatus filled with salt solution before fitting the cannula into the vein, to prevent, of course, entrance of air into the venous system. The cannula is tied into the vein selected and the syringe elevated. If the fluid does not run in quickly enough, the piston is inserted and the liquid forced in. A finger-and-thumb clamp of the tubing at the nozzle of the syringe enables the syringe to be withdrawn, filled again and reapplied, and so on until enough fluid has been forced in. (The writer then cites three cases in which injections of from twenty ounces to a pint and a half of saline solution into the median basilic vein, or into the saphena vein in a bleeding stump, proved very effective; a case of severance of the common carotid artery and external jugular vein; another of secondary hemorrhage in an amputated leg, and another in hemorrhage from a crushed leg. In all of these the patient's life was saved.) . . . The ward sisters have noticed that patients perfused always appeared to have a good night after the operation and rarely complained of pain. The solution appeared to possess anodyne properties.

I am convinced that in saline flushing of the abdomen, injection into the rectum or into veins, we have a valuable, probably the most valuable, means of dealing with collapse, whether due to loss of blood or not.

In cases which are not extreme, elevation of the foot of the patient's bed twelve or eighteen inches and the injection of a quart or more of hot saline solution into the rectum by means of a Higginson syringe with a French catheter on the nozzle, so that the fluid can readily enter the colon, acts in a few seconds like a charm. . . . It is of very little use in such patients to endeavor to stimulate the heart by ether or alcohol.

### **Sacro-Iliac Disease.**

Archibald W. Cuff, F.R.C.S. Eng., reported in the *Lancet* October 1st, 1898, an interesting case of the above. In October, 1896, a youth aged eighteen years, whose parents both died of pulmonary tuberculosis, complained of pain in the sacral region. The pain gradually increased, and with the increase of the pain came a sense of weakness in the left lower limb, and an inability to bear much weight upon it. The patient lost in weight, and the lameness, inability to walk, the alteration in the shape and apparent length of the limb became well marked, whilst the pain was much increased by movement and pressure over the iliac bones. The glutei muscles and muscles of the lower limb became much wasted



and an oval, fluctuating swelling, with its long axis almost vertical and about 4 inches in length, appeared over the position of the sacro-iliac joint.

The operation devised by Golding Bird and Collier was performed as follows: A large, semi-lunar flap consisting of skin, fascia, muscles and the posterior sacro-iliac ligament was raised in a forward direction, disclosing an abscess which communicated with the joint cavity. The joint was opened by a  $\frac{1}{2}$ -inch trephine, and its cavity was found to contain pus, fragments of bone, and was lined by granulation tissue. The morbid products were all removed, the wound was cleansed, the flap replaced and secured by silk-worm gut. Two weeks later tuberculous nodules appeared along the line of the incision. These were scraped away; the cavity was packed with iodoform gauze, and iodoform emulsion was used in the subsequent dressings. A long, outside splint was applied on the diseased side, and in January, 1898, the wound had healed, the pain and lameness had disappeared, and the patient resumed work, enjoying the best of health and with no loss of stability in the pelvis.

#### Intraperitoneal Rupture of the Urinary Bladder.

H. Littlewood, F.R.C.S. Eng., reports in the *Lancet*, October 1st, a case of the above, with abdominal section, suture and complete recovery.

A man, aged twenty-eight years, arriving at his home at 11 p.m. much intoxicated, giving no account of what had happened to him, complained that night and next day of a diffuse pain in his abdomen. He was seen at 10.30 the next night, when the following notes were made:

1. Diffuse abdominal tenderness and signs of fluid in the peritoneal cavity.
2. Pulse, 88, soft; respiration, 18.
3. Had passed no urine since the previous night; two ounces were obtained by catheterization.

Next day the following notes were made:

1. Temperature normal; pulse, 100; diffuse abdominal tenderness; distinct signs of fluid in the peritoneal cavity.

One ounce of urine was removed by catheter and diagnosis of intraperitoneal rupture of the urinary bladder made.

Abdominal section revealed four pints of a turbid, urinous fluid in the peritoneal cavity; the intestinal coils seen were glued together by a purulent lymph; a rent in the median line of the urinary bladder,  $1\frac{1}{2}$  inches in length, extending up to the peritoneal reflection; the vesical wall thick and apparently healthy.

The rent was closed by the Lembert suture, catgut being

used; the peritoneal cavity carefully cleansed, and drainage in the form of a Bantock's tube was employed for forty-eight hours.

The patient passed water in six hours: has continued to do so regularly ever since, catheterization never being necessary: temperature remained normal, and the patient made a complete recovery without a single bad symptom in three weeks.

Dr. Littlewood states that an early diagnosis and early operation in all intraperitoneal catastrophes are of the greatest importance, and the treatment in this case is the treatment employed in all the successful cases reported.

### A Case of Septic Peritonitis; Laparotomy—Recovery.

H. W. Mills reported an instance of the above in the *Lancet* of October, 1898. The patient, a strong, well-nourished woman, gave a history of gonorrhœa many years ago, and of recurring attacks of pelvic peritonitis followed by pelvic abscess discharging per vaginam. During one of such attacks the abscess burst intra-peritoneally and septic peritonitis resulted. The patient lay upon her back with legs drawn up: distended abdomen; low, muttering delirium; vomiting; temperature, 103° F.; pulse 140.

Per vaginam the uterus was fixed as if in a plaster cast, cervix high up, and the posterior and lateral fornices bulging. Abdominal section two days after the rupture revealed superficial coils of intestine, abdominal wall and omentum densely adherent, and when the general peritoneal cavity was opened, several quarts of a brownish, very offensive fluid containing large, thick flakes of lymph escaped, followed by a pint of offensive brown pus. The upper part of the abdominal cavity was shut off by adhesions. The abdominal cavity was thoroughly cleansed with boiled water, packed with iodoform gauze and a tight binder applied. The patient was kept on fluid diet, and stimulants and opiates given as required; the abdominal cavity being irrigated twice a day with boric acid lotion and later with liquor sodæ chlorinatæ and packed with iodoform gauze. Intestinal obstruction threatened several times; the discharge, at first very purulent, gradually became more serous and less in amount, the cavity closed, and the patient, now a year after, is enjoying the best of health.

### A Simple and Effectual Method of Sterilizing Catgut.

Mr. Mayo Robson describes a "simple and effectual method of sterilizing catgut" in a recent issue of the *Lancet*. He says a growing sense of the superiority of readily absorbable material, such as catgut, for ligatures and buried sutures, if

only one could be sure of its absolute asepticity, and the uncertainty of the commercial preparations led him to make some experiments on the effect of heating catgut in substances other than water with a view of determining whether, after heating for some time at a temperature of  $100^{\circ}$  C., it would still be sufficiently strong to be employed as a suture or ligature. Alcohol, xylol, aniline and glycerine were tried, but xylol (di-methyl-benzene) was found to give the best results. At first, dry, chromic, carbolic catgut was used, but he finds ordinary unmedicated catgut equally good. The exact method of preparation is as follows:

The catgut is wound loosely from end to end round an elongated glass reel, and several of these reels are introduced into a metal cylinder, the cap of which screws on, and after more xylol than is sufficient to cover them has been poured in, the cap is adjusted. The whole is then put into the boiling water of the sterilizer and allowed to remain along with the instruments for from twenty minutes to half an hour. After being thus sterilized the reels with the catgut, which has shrunk round them, are removed at once and kept either in 5 per cent. carbolic acid solution or in methylated spirit, the latter being preferable, as an aqueous solution tends to cause catgut to swell. In this solution they may be kept on the reels until required. He has kept them as long as five weeks without any diminution in the strength of the gut, but he ordinarily prepares the catgut at the same time and along with the instruments before each operation. After each heating, the cylinder should be dried and the used xylol rejected, as a certain amount of decomposition takes place, and catgut will soften if heated in it a second time. Care should be taken that no water is allowed to mix with the xylol, or the catgut will gelatinize. The great advantage of this method of sterilizing catgut lies in its simplicity, and the ease with which it can be carried out.

Another method of sterilizing catgut is described by J. H. Dauber, M.R.C.P., of the Hospital for Women, Soho, London. It is the method of sterilizing by dry heat, adopted by Professor Tscherning, of Copenhagen. The ordinary commercial catgut is placed on trays in the sterilizer between sheets of cellulose paper. It is then heated for six hours consecutively—for the first hour at a temperature of  $60^{\circ}$  C., for the second and third hours at  $100^{\circ}$  C., and for the fourth, fifth and sixth hours at  $140^{\circ}$  C. It is then removed, wrapped up and closely sealed in an envelope of cellulose paper, which is again placed in another envelope of slightly larger size and similarly closed. The catgut, now encased within two firmly sealed envelopes, is a second time placed in the sterilizer and subjected for another two

hours to a temperature of 140° C. The envelopes are placed in racks in the sterilizer, and contain various sizes of catgut labelled on the outside. These envelopes can be taken from the sterilizer and placed in the bag of the operator, and need not be opened until the time of operation. Catgut ligatures kept for any time in an aqueous antiseptic solution become soft and lax, and if kept in spirit, hard. The dry catgut is without these disadvantages.

The method of raising the temperature by slow degrees prevents the catgut becoming brittle, the grease and oil in the gut being driven off gradually at the lower temperatures.

---

## OBSTETRICS AND GYNECOLOGY.

IN CHARGE OF ADAM H. WRIGHT, JAMES F. W. ROSS ALBERT A. MACDONALD,  
H. C. SCADDING AND K. C. McILWRAITH.

### Significance of Pain in Gynecological Diagnosis.

*Peri-uterine Pain.*—This variety of pain has its origin in the tube, ovary or parametrium. It may be primary or transferred; one variety is called, for the want of a better name, pelvic neuralgia. In the acute inflammation of these parts the pain is deep and lancinating, and radiates throughout the pelvis, corresponding to the ramifications of the sensory nerves; in the chronic inflammatory processes, where cicatrices, adhesions, or scleroses are present, the pain is local and more specific in relation to the diseased part.

1. *Pain in Ovary.*—The sclerotic or sclero-cystic ovary is usually very painful. This is not surprising if we reflect that the lesion reveals an hereditary or acquired predisposition to the sclerotic processes. The constitution of the patient could in most cases be defined by the term neuro-asthenic. Where the primary inflammation is slight, or where the sclerotic processes indicate a vicious type of degeneration of the ovary, it is certain that the rupture of the follicles is painful, and the work of elimination slow and preceded by a long congested period with apoplexy of the cortical substance. This process tends to the formation of hypertrophy, and is frequently attended by hemorrhage. In such cases menstrual period is particularly painful. If there be prolapse of the ovaries with adhesions the local pain is increased. In the intra-catamenial period, when the ovaries have been primarily affected, we often notice as a consequence a singular alternation upon the two sides of the pelvis, the pain being the one side one month and the other the next.

2. *Pain in Fallopian Tubes.*—Chronic salpingitis is painful for two reasons: first, on account of the exudations causing

adhesions with the neighboring organs; second, on account of distention of the tube, usually at the menstrual period. One fact appears to us to be beyond dispute, that small and lax adhesions no more than the existence of serous exudations are insufficient in themselves to cause pain. It seems that active inflammation and the presence of infection are needed to make this condition painful. The prolapse of the tube towards the cul-de-sac is always troublesome, and, at least, causes slight pain and uneasiness. We shou'd notice the probability of making a wrong diagnosis in salpingitic pain. The patient might complain of pain in one side of the pelvis, when upon examination inflammatory exudation or a tumor may be discovered upon the other side. We have seen a displaced tube lying across the posterior face of the uterus in such a position that its pavilion, extended by exudation, formed a tumor which was fixed to the pelvis on the opposite side. The pain in this case was located in the fine nerves which are distributed upon the tube through the corresponding ligament. The pain of salpingitis is generally fixed, and undergoes increase during menstruation, not previous to menstruation, as in ovaritis. But after menstruation it undergoes marked decrease, and reappears two or three days later. This latter pain is caused by the traction of the adhesions which fix the tube to the pelvis.

3. *Pain in Inflamed Tubes and Ovaries with Adhesions.*—Pain in this condition partakes of the characters previously described. The pain is sometimes in the ovary, sometimes in the tube, the degree of pain depending to a large extent upon the sensibility of the patient. It may be discovered by direct examination that the location of the pain is in the cul-de-sac. In all cases it is present behind the posterior neck of the womb, and is easily produced by a direct pressure. Pain is also present upon the abdominal walls and in the iliac region corresponding to the affected side. It is both deep and superficial, and may be discovered easily by a slight touch of the skin. If the speculum be introduced too roughly, it occasions extreme pain; the same may be said of vaginal douches when harshly given. Cold increases the pain, and too much walking gives great fatigue. Mental and physical exhaustion also add to the pain, and in some women the least annoyance will revive the pain. The return of each menstrual period increases the suffering in a high degree. The duration of the pain varies with different patients, and is increased by actual congestion of the womb, coitus, and may be accompanied by turgescence of the cervical mucous membrane, and leucorrhœa. The character of these pains is variable. They may be throbbing or extremely sharp; they may resemble severe pinching or convey a burning sensation. It is, however, worthy of attention

that the intensity of the pain does not correspond to the importance of the lesions, for some women scarcely suffer any pain from extensive salpingo-ovaritis, while others suffer severely from an extremely small lesion.

4. *Pain in the Perimetrium.*—In this class we find exudations, adhesions, cicatrices, and chronic infiltrations of the cellular tissue which directly encircles the uterus. We should remember that every cervical, ovarian or tubal lesion, reacts upon the perimetrium or upon the ligaments of the affected parts. We do not consider the perimetrium of paramount importance, but we are obliged to give it consideration in diagnosis and treatment. Pain in lesions of this part does not always correspond with the location of the lesions, which are found by physical examination. A neuritis may be present, or, in the absence of this, a special nervous susceptibility. True neuralgia is allied to the neuro-asthenic constitution, and is at all times distinct from hysteralgia (painful spasm of the neck), which is found in the median region of the pelvis, and which a direct examination proved to be localized at the internal os.

Victoria, B.C.

ERNEST HALL, M.D.

Translated from *La Gynécologie*.

### Intravenous Injections of Normal Saline Solution.

Horace Tracy Hanks (*Amer. Gyn. and Obs. Journ.*, September, 1898), as a preventive to shock, instructs his patients to have every hour, for six hours before the operation, from one to three teaspoonfuls of whiskey in one ounce of hot water, and two hours before the operation he passes into the rectum, high above the brim if possible, from one to two ounces of whiskey in four ounces of normal saline solution. Patients thus prepared come to the table with a good pulse and a flushed face. They recover more quickly from ether narcosis, and return to consciousness more promptly, and are not so thirsty and restless.

He uses regular and systematic intravenous injections for loss of blood from any cause, as, for instance, severe traumatism, for the early stage of sepsis, for suppression of urine and obstruction of the bowels from paralysis. One to three pints is usually sufficient, and the temperature is not less than 115° F. The pulse tension is a good indication when to stop. It may be repeated in from four to twelve hours if occasion demands. If a chill follow, too cold fluid has been used. A hypodermic of morphia invariably relieves this.

How this simple saline solution acts is not certain. That the cardiac and arterial ganglia are stimulated is certain, as evidenced by the flushed appearance of the capillaries under

the cuticle. The heart, besides, has something to contract upon and the flushing out of the smallest blood vessels follows.

The common every-day formula, which is easy to remember, is a teaspoonful of table salt to a pint of water, the whole to be boiled for half an hour and filtered through several thicknesses of a sterilized towel, and kept in a close bottle well corked with cotton, and this cotton properly protected with clean gauze.

Before beginning any operation, which may possibly require transfusion, a two-quart bottle is filled with this solution and kept hot with hot towels or water around it. A rubber bag, rubber tubing, and a probe-pointed hollow needle, with eye on the side near the end, are used, and the slit in the vein is only made large enough to admit the probe-pointed needle. These he always carries in the bottom of his instrument bag to every operation so as to have them at hand in any emergency. He advises the saline injection even before operation in patients with a very feeble pulse or in septicemia, especially when an operation is decided upon.

[This method is so little better than subcutaneous injection, or injection by enema, and is at the same time accompanied by such grave dangers that it is not likely to come into general use. -- Ed.]

#### ✓ Treatment of the Vomiting of Pregnancy.

Bacon (*Amer. Journ. of the Med. Sci.*, June, 1898) publishes three cases of hypermesis gravidarum where he induced premature labor without curing the vomiting, and which all ended fatally. He quotes Cohnstein's statistics, embracing two hundred cases, of which 40 per cent. only were cured by abortion. From his experience and from an examination of the literature of the subject, he draws the following conclusions: (1) The abnormal irritability of the nervous system, including the vomiting centre, is to be allayed by keeping the patient in a horizontal position, by attention to the skin, bowels, and kidneys, using rectal and, if necessary, hypodermic injections of normal saline solution. (2) The hysterical condition so often present should be controlled by strengthening the will and influencing the dominant ideas of the patient. (3) All sources of peripheral irritation should be discovered and treated. (4) In extreme cases subcutaneous saline injections serve the three-fold purpose of (a) diluting the blood and raising blood pressure, (b) eliminating toxins through the renal and intestinal excretories, (c) furnishing two most important kinds of food (chlorides and water). He reports a case in the ninth week of pregnancy and in a desperate condition, where the hypodermic injection of a quart of salt solution twice a day, combined with

washing out the stomach every morning and rectal injections of salt solution four times a day, produced immediate improvement. The vomiting ceased after the second injection, and food was retained, though the patient eventually died of tetanus (? from an infected hypodermic puncture). Laborie in France has also used this method with excellent results. (5) Induction of abortion is never indicated. At a stage when it is safe and efficient, it is not necessary, and in extreme cases it adds greatly to the danger, rarely stops the vomiting, and can be substituted by artificial serum.—*Brit. Med. Journ.*

### Influence of Morphine and Ether on Uterine Pains.

Hensen (*Archiv f. Gynäk.*, vol. lv., Part 1, 1898) publishes a very exhaustive monograph on this subject, furnished with instructive tables. He finds that morphine in doses of under a third of a grain exerts no influence on the force of the pains and of the abdominal muscles. Ether causes a distinct effect, as after one or two minutes the force of the pains is diminished and the interval prolonged. When ether is discontinued the previous force of the pains is restored in from five to twenty minutes. Under ether narcosis the abdominal muscles cease to aid in the process of labor. Chloroform produces similar effects on the pains, but when its administration is suspended restoration of the pains to their previous force of frequency is very much slower. Its evil evidence does not disappear for quite two hours. Hence Hensen urges that ether should always be used as the anesthetic in labor. It facilitates turning and forceps delivery as well as the ether compound, whilst its effects very rapidly disappear, a most desirable result when we remember the chances of *post-partum* hemorrhage after instrumental labor.—*Brit. Med. Journ.*, April 23rd, 1898.

### A Speedy Method of Dilating a Rigid Os in Parturition.

Dr. J. Farrar, Gainsborough (*Brit. Med. Journ.*, September 17th), describes "a new and speedy method" of dilating a rigid os. He had been in attendance on a primipara off and on for forty-eight hours, and yet at the end of that time the os was not larger than a shilling, and felt very much like a circle of sheet tin. The patient was losing self-control, and as chloroform was contra-indicated he had decided to incise the margin of the os, and before doing so applied a local anesthetic—cocain, 10 per cent. solution—both outside and inside the os. After waiting four minutes he prepared to use the scissors to the margin of the os, and was agreeably surprised to find that "the os had not only lost its rigidity, but that it was widely open and as flexible and distensible as a rubber bag."



Fearing that there was something of "the accidental" in this case he kept a sharp look-out for the next rigid os, and the cocain acted in a similar manner a few months later.

He then brought the two cases to the notice of the Obstetrical Society of London. Now he adds three additional cases, in all of which the cocain acted within four minutes, and in which there could be no reasonable doubt that the result was due to the cocain. In cases of undoubted rigidity, the result of active physiological causes, he does not expect to find failure. "Try it for yourselves and report the result."

#### Ignipuncture of the Ovary for Chronic and Cystic Ovaritis.

As an alternative to the removal of both appendages by laparotomy, the conservative operation of ignipuncture is well worth a trial. It can be done by vaginal section (either by anterior or posterior colpotomy). The peritoneum having been opened, any adhesions binding down the ovary are separated with the finger. The ovaries, one after the other, are drawn into the vagina and punctured with the fine point of Paquelin's cautery heated red-hot. Whenever there is an indication of a cyst in the cortex, or an unusually thick portion of the capsule of the ovary, the red-hot point is inserted. In this way from six to a dozen punctures, each about  $\frac{1}{2}$  of an inch in diameter, are made. The appendages having been replaced in the peritoneal cavity, the vaginal wound is closed with catgut and the patient put back to bed.—CHRISTOPHER MARTIN, *Birmingham*.

#### Puerperal Sepsis.

This is a preventable disease, and we obstetricians have to face this fact, and do our utmost to accomplish it. If we are not doing this, we are failing in our duties and may justly be held responsible. The day has gone by when we can fold our hands and say it is the will of God when our patients develop puerperal fever.—ROBERT JARDINE, *Glasgow*.

#### Abortion.

Be conservative in the presence of a normally coursed abortion; wait and give nature an opportunity to act. Be radical when dealing with an abnormally coursed abortion; interfere and empty at once.—FRANK A. STAHL, *Chicago*.

## PATHOLOGY AND BACTERIOLOGY.

IN CHARGE OF J. CAVEN AND H. B. ANDERSON.

### Endocarditis in Tuberculosis: in particular that form caused by Koch's bacillus.

G. Etienne (*Arch. de Méd. Experiment. et d'Anat. Patholog.*, January, 1898) first calls attention to the facts that septic infection during the course of tuberculosis, especially pulmonary tuberculosis with cavity formation, is not rare, and that the explanation lies in the frequency with which secondary organisms—streptococci, staphylococci, pneumococci, Friedländer's bacilli, bacillus pyocyaneus, colon bacilli, etc., etc.—find their way into such cavities. Some believe, indeed, that these secondary infecting forms are largely responsible for cavities. Amongst the lesions induced by these organisms is endocarditis. Teissier has collected records of forty-seven cases; some of these, however, are doubtful, their endocardial lesions, probably, being properly attributed to valvular arterio-sclerosis. Teissier's own cases, beyond dispute, were nine in number. True *tubercular* endocarditis is very rare. Teissier found it in none of his cases. In twenty-eight recorded cases of tubercular myocarditis there is no mention of endocardial lesions. In 845 cases of general tuberculosis brought to autopsy, Willig found no endocarditis. Of possible cases many have not been proven. Loude and Petit have proven a case each by both stain and guinea-pig inoculation; these two only, of eleven recorded cases, are proven by inoculation experiments. By a singular coincidence, Etienne came upon five successive cases of endocarditis in tuberculous patients from Spillmann's clinic. In two only of these were the investigations complete, and in both Koch's bacillus was shown to be the cause of the endocardial changes. In a third the bacillus of Koch was demonstrated by stain, not by inoculation of animals. The two remaining cases were not bacteriologically examined. It is proven, then, that endocarditis may complicate tuberculosis, and that it may show purely tubercular lesions or those of ordinary non-tubercular endocarditis. Caseation of vegetation has been seen. It may be impossible to demonstrate such tuberculosis clinically. It comes late when cachexia is advanced, and masks the special results of endocarditis. The valves are soft and pliable, and close perfectly enough to prevent signs of leakage.

### Bacteria and Calculi: Salivary and Biliary.

Hartmann (*Le Bulletin Méd.*, February 27th, 1898) found streptococci in the centre of a calculus taken from Wharton's duct. Mignot, in an examination of seventy cases of biliary calculi,

found bacteria in twenty-three. The bacillus coli com. was most often seen, and he found it also in the bile. He also experimentally produced biliary calculi—corresponding structurally with spontaneously formed specimens—by means of the bacillus coli, and so proves the infectious origin of biliary lithiasis.

### The Tonsil as a Point of Entrance for Severe General Infectious Diseases.

Jessen, of Hamburg (*Muenchner medicinische Wochenschrift*, June 7th, 1898), says that diphtheria may serve as the type of infectious disease which begins at the throat. The germ of scarlet fever is also believed to enter at the same portal. It is claimed that from seventy to eighty per cent of all cases of acute rheumatism have an angina as a prodrome.

Of other diseases whose connection with initial angina is hardly suspected by the profession at large, Jessen mentions osteomyelitis, which has been found in a number of cases to date from a streptococic infection of the tonsil.

Jessen then relates in detail a number of cases in which various grave diseases were ushered in by angina, and where a bacillary investigation of the tonsil showed pathogenic germs. Among the diseases named are acute rheumatism, pleurisy, pneumonia, pyemia, septicemia.

### First Experience in the Use of Serum as a Cure and Preventive in Yellow Fever.

Prof. Joseph Sanarelli, Director of the Hygienic Institute of Montevideo (*Ann. de l'Institut Pasteur*, March 25th, 1898), says: We can look for cure of yellow fever in one direction only, viz., towards serotherapy. The idea that specific treatment may be found in this direction is based upon two observations: 1. That tolerance of the virus is seen in those born in countries where yellow fever is endemic or in those who have lived there a long time. 2. That those who recover from an attack have acquired immunity.

This serum for cure and for immunizing differs from other similar serums only in the difficulty found in rendering animals immune from which it is to be taken. Horses require twelve to fourteen months' treatment, steadily carried out, before yielding useful serum. Moreover this serum does not act as do others, e.g., the diphtheria antitoxic serum. It has not yet been possible to demonstrate the presence of antitoxic substances in the serum. Dogs which after a year or more of intensive vaccination are tolerant of a dose, formerly certainly fatal, still vomit, become highly prostrated and show great elevation of

temperature with each injection. This goes to prove the absence of antitoxic material in the vaccinal condition, and that the serum is efficacious only when the fatal dose of poison has not yet been formed in the organism. The serum then is really an anti-microbial, not an anti-toxic serum. It is bactericidal in action, and good results may be looked for only when its use has begun early.

Sanarelli thinks that the ideas of the disease entertained by those who have had no experience in it are commonly wide of the mark. It is thought of as resembling cholera, and showing especially lesions of alimentary tract, whereas it ought to be classed with the typhoid diseases. It is a febrile disease, highly toxic, and with lesions and symptoms which are far from being specially confined to the gastro-intestinal tubes. Albuminuria, anuria, delirium are often seen with no symptoms from the digestive tract at all. In some epidemics anuria is the symptom. In cases in which the kidneys fail of their duty serum treatment is useless.

#### The Length of the Incubation Stage in Typhoid Fever.

E. Jancken (*Wiener klinische Wochenschrift*, 1898, No. 27) had an opportunity of making an important observation. Certain troops marching through two small villages in which were a number of cases of typhoid fever, drank copiously of water given by the villagers. That infection was acquired in this way follows from the absence of other exposure. Moreover, other troops passing through without pausing to drink remained free from infection. Of the thirty-six cases the symptoms appeared suddenly in all, with headache, chill, fever, severe diarrhea, abdominal pain, and weakness. The course was mild, and defervescence occurred in the third week. The beginning of the disease was noted in three men on the second day (*i.e.*, two days after infection), in seven on the third day, in six on the fourth, four on the sixth, five on the seventh, in the other seven between the ninth and fourteenth days. This shows that under favorable circumstances the typhoid bacilli can produce symptoms within two days. In the cases observed the favorable conditions consisted in great fatigue, excessive thirst, and ingestion of considerable quantities of the infected water. That the germs were not of unusually great virulence may be supposed from the mild form of the disease.—*Amer. Journ. of Med. Sci.*, October, 1898.

#### Intra-uterine Typhoid.

In the *Scottish Medical and Surgical Journal*, 1898, vol. iii., No. 1, Fordyce reports a very interesting case in which typhoid was demonstrated in a five-months' fetus. The mother aborted

and died soon after. No autopsy could be obtained, but there was no doubt about the diagnosis.

Externally and internally nothing abnormal could be seen by the naked eye in the fetus or its appendages. There was a small quantity of serous fluid in the abdomen. The intestines seemed quite healthy; the liver and spleen were not enlarged. Tubes inoculated from the kidney, spleen, and intestinal contents gave pure cultures of the typhoid bacillus; the blood was sterile. Care was taken to make tests, which showed the absence of the bacillus coli communis. It was impossible to demonstrate bacilli in the tissues by microscopic examination. The Widal test was very successful in this case.—*Amer. Journ. of Med. Sci.*, October, 1898.

### Satellitism of Colonies of Pfeiffer's Bacillus in Mixed Cultures.

Meunier (Société de Biologie, Séance du 11 Juin, 1898, *La Semaine médicale*, June 15th, 1898) found that when Pfeiffer's bacillus is inoculated on a proper medium (blood-agar), on which staphylococcus aureus is then planted, the growth of the influenza bacillus is greatly favored, and colonies ten or twenty times the usual size are developed. Divers other common bacteria have the same influence as the staphylococcus, but in a less degree. The mechanism of this symbiosis, this *cultural satellitism*, is obscure, but the observations of the author and of Grassberger show that the fertilization is not due to a product directly secreted by the adscititious germ, but to a modification of the hemoglobin of the medium. The matter is also of practical value, in view of the difficulties attending the cultivation of the influenza bacillus. The author recommends the following method: An aqueous solution of defibrinated blood from the rabbit or, better, the cat is prepared, and is used to impregnate the surface of agar. On this medium the Pfeiffer bacilli are then inoculated, and then, after the tubes have been allowed to dry in the vertical position for a few hours, staphylococcus aureus is implanted at two or three points. Twenty-four hours in the incubator suffice to give beautiful satellite cultures of Pfeiffer's bacillus.—*Univ. Mag.*

### Presence of the Meningococcus in the Nasal Secretions.

Schiff (*Centralblatt für innere Medicin*, June 4th, 1898) recalls the fact that epidemic cerebro-spinal meningitis has long been known to begin with violent rhinitis, evidences of which are often found on autopsy. After the discovery of the meningococcus intracellularis in the nasal discharges of meningitic cases, it became the custom to examine for this parasite as a routine measure, and many clinicians have invariably found it. Then

observers began to examine non-meningitic cases to determine whether this parasite, like the pneumococcus, was present in the healthy subject. The earlier investigations having been inconclusive, Schiff was led to look into this matter, and in the nasal mucus of twenty-seven healthy patients found the meningococcus seven times. Cultures proved virulent to guinea-pigs. The fact is established that the parasite occurs much oftener than it infects, and there has long been a conviction that epidemic cerebro-spinal meningitis is spread by the nasal mucus. The curious fact that typical cerebro-spinal meningitis has often followed fracture through the base of the skull is readily explained by the passage of the germ through the breach.—*Med. Rev. of Rev.*

#### Purulent Arthritis and Friedländer's Pneumobacillus.

Several cases of purulent arthritis occurring in the course of pneumonia are on record. So far, bacteriological examination has shown that the cause of this inflammation of the joint is Fränkel's pneumococcus. Emil Bois describes a case (*Arch. Gén. de Méd.*, May, 1898) in which he was able to discover Friedländer's pneumobacillus as apparently the cause. The writer has only been able to discover one other case in medical literature. In the instance quoted several careful bacteriological examinations were made, consisting of cultures and inoculations, and he was able to find Friedländer's pneumobacillus. This case resembles those due to the diplococcus in the fact that it ended fatally. The prognosis in all cases of pneumonic arthritis is excessively grave, but in a case quoted by Gaillard and Morley recovery took place. This case was one of purulent arthritis of the right wrist, preceded by a lobar pneumonia and followed by a left empyema. The arthritis was treated by incision and drainage, and the patient so far recovered that there was only a slight degree of stiffness of the wrist. The pus from the joint contained diplococci in abundance.—*Brit. Med. Journ.*, Nov. 12th, 1898.

#### Preservation of Organized Sediments.

Treat the sediment with the following solution :

Distilled water .....	200.0 grammes.
Sodium chloride .....	1.0 "
Sodium sulphate .....	5.0 "
Mercuric chloride .....	0.5 "

Let settle for twenty-four hours, pour off the solution and wash a few times with distilled water. All constituents of the sediment will present themselves in their unaltered shape and structure, just as they are found in the urine. To obtain a

colorless specimen, take with the pipette some sediment in a little glycerine on a slide and close with turpentine or mastix. Colored preparations are obtained by drying some of the sediment on the air and subjecting it for about an hour to a saturated aqueous solution of methylene blue, after which it is washed with distilled water. After drying, bring under the cover-glass with damar.

## OPHTHALMOLOGY AND OTOTOLOGY.

IN CHARGE OF G. STERLING RYERSON.

### Acetylene Gas-light for Examination of the Eyes.

Appenzeller, of Rertlingen (*Centralbl. f. Prakt. Augenheilkd.*, May, 1898), has a special apparatus with a 50-candle-power burner which gives an absolutely quiet, white light particularly well adapted for ophthalmoscopic purposes. He considers his apparatus absolutely free from danger, and has used it many times a day with the greatest satisfaction.

### Bilateral Chancre of the Eyelids.

Helborn (*Muench. med. Wochenschr.*, May, 1898) reports a chancre of each eyelid. Many other cases of a single chancre have been reported. The disease is inoculated from mucous patches in the mouth or direct from the penis.

[A case occurred in my practice some years ago of a chancre of the lower eyelid followed by enlargement of the pretear glands and secondary symptoms in a young medical man who inoculated himself after a vaginal examination. Serious disturbance of the general health followed. He died of an intercurrent disease two years later. I once saw a chancre on the end of the nose at Fournier's clinic in Paris. The professor explained that the patient was too inquisitive.—G. S. R.]

### Indications of Warm or Cold Applications in Eye Diseases.

Herrnhaiser, of Prague (*Die Artzliche Praxis*, Nov. 3, 1898,) says that cold applications are indicated in the course of acute catarrhal conjunctivitis, inflammatory stage of trachoma, blennorrhoea and in pain after operations on the conjunctiva and in episcleritis. In interstitial keratitis, acute iritis and iridocyclitis either hot or cold applications may be used. In exudative iritis it is much better to use hot applications. The pain of glaucoma and panophthalmitis is best treated by heat.

[The question of the application of heat or cold in eye diseases cannot, in my opinion, be settled off hand. The rule which I

make is: 1. Acute diseases attended by discharge from the conjunctiva are best treated by cold. Heat promotes discharge. 2. Most acute diseases attended by pain are benefited by hot applications. There are some exceptions which cannot be defined, being the result of individual idiosyncrasy. This peculiarity is sometimes very marked. Cold should never be used after operations on the cornea in old or feeble persons. It is liable to be followed by sloughing of the cornea.—G. S. R.]

### Steel in the Vitreous Located by X-ray and removed by a magnet.

Starr, of Buffalo (*Oph. Rec.*, July, 1898), relates a successful case of the above. The steel was removed forty-eight hours after the injury.

---

## PEDIATRICS.

IN CHARGE OF ALLAN BAINES, W. J. GREIG, W. B. THISTLE.

### Meningitis.

Bacteriological studies lead strongly to the belief that meningitis in all its phases is an infectious disease. Under the old classifications the varieties of the disease were numerous and confusing, but study of their micro-organisms points strongly to their unity.

Collins, in the *Twentieth Century Practice*, classifies the active exciting causes as follows:

1. Traumatic and infectious.
2. Contagious and infectious.
3. Infectious and metastatic.

The first group includes all the cases in which pathogenic bacteria have gained admission to the body through wounds, injuries, or simple abrasions.

The second group includes those which develop in connection with pyogenic disease of adjacent structures and cavities, such as the mastoid and middle ear, and even organs so far removed as the tonsils.

The third group includes those cases of meningitis which are secondary to other infectious diseases, notably pneumonia, typhoid fever, cholera, dysentery and influenza.

Holt classifies leptomeningitis thus:

1. It occurs epidemically, usually with the same process in the cord, and is then known as cerebro-spinal meningitis.
2. It occurs sporadically as a primary disease, with, it may be, symptoms and lesions identical with those seen in the first group.
3. It occurs as a secondary disease complicating other acute



infectious diseases. We are not, he says, able to separate absolutely these three groups by the clinical symptoms, the pathological findings, or even by bacteriological examination.

The bacteriology of meningitis is not yet fully settled. No specific bacterium has yet been with certainty demonstrated. Like pneumonia, meningitis may be caused by several different forms of bacteria.

Collins divides true meningitis into three varieties: Leptomeningitis, cerebro-spinal meningitis, and tuberculous meningitis. In the first group bacteriological examination will reveal the presence of some pyogenic organism, of which the pneumococcus, the streptococcus pyogenes, and the diplococcus pyogenes are the most common.

In cerebro-spinal meningitis the organism most frequently found is the pneumococcus, which in both sporadic and epidemic cases has been found in pure culture. But recent German teaching attributes much to the diplococcus intracellularis, which closely resembles the diplococcus of pneumonia. The exact relationship of these two germs is in dispute. Tuberculous meningitis is due primarily to the tubercle bacillus, which is, however, often accompanied by pyogenic germs, thus resulting in a mixed infection.

Other causes are simply predisposing. Weichselbaum asserts that the diplococcus intracellularis is the exciting cause of the epidemic form of cerebro-spinal meningitis, although it may be complicated with other germs. It is not, however, asserted that this diplococcus is found in the sporadic forms of the disease, which are said to be due to the common germs of purulent meningitis, particularly the pneumococcus.—*Abstract from Archives of Pediatrics.*

### Cerebro-Spinal Meningitis.

T. M. Rotch (*Archives*, September, 1898). A girl, 3½ years old, admitted to hospital, January 17th; symptoms indefinite, a little vomiting and headache, with indications of rachitis. Temperature ranged from 98 to 105, pulse from 98 to 140, respirations 30. Blood examination showed nothing abnormal in the form and size of the red corpuscles. A lumbar puncture was made, and the diplococcus intracellularis was found, and the diagnosis of chronic cerebro-spinal meningitis was made. The subsequent course pointed decidedly to this disease. The case lasted till the end of April and then recovered.

### Intussusception.

T. M. Rotch (*Archives of Pediatrics*).

CASE 1. A girl five years old, with history that for six months she had had paroxysmal attacks of abdominal pain and

vomiting. November 6th, 1897, complained of abdominal pain, which increased during the night, followed by vomiting in the morning. I saw her twenty-four hours after, during which time she had passed no fecal matter, but a bright red blood mixed with mucus. A mass was found in the right hypochondrium, which could not be reached by rectal examination. Hydrostatic pressure from a fountain syringe held at the height of 4 feet was used with an almost instant disappearance of the tumor. There were no more symptoms of intussusception.

CASE 2. A boy two years old, with the following history: No sickness of any kind until twelve days previously, when he fell out of bed, and on the following day vomited several times. Since that time he had vomited all his food and had a profuse watery diarrhea. He was examined carefully and nothing abnormal was found, but he looked sick. During the following day he improved, but still passed a small quantity of bloody mucus. Eleven days after entrance he became restless, vomited in the evening and cried during the night. On the following day he vomited all his food, but had no motion excepting some bloody mucus. At 8 o'clock in the evening a tumor was felt in the left iliac region, and by 9.30 it extended down the whole side of the abdomen to the anterior superior spinous process. There was continued tenesmus and passage of blood and mucus. At 10.30 p.m., hydrostatic pressure from a fountain syringe held at a height of 5 feet was tried. The tumor immediately disappeared. It returned the next day in the same locality, and hydrostatic pressure failed to remove it. He was then transferred to the surgical wards, where on operation an intussusception of the ilium into the cecum was found, which had apparently existed for a long time as the layers were firmly adherent. A smaller and more recent one was easily reduced, but the larger resisted all efforts. The child died.

Dr. Huber mentioned a case in which a high rectal enema under moderate pressure allowed a good deal of water to enter, showing that the intussusception was high up. The water escaped, but the symptoms did not improve, and at the operation an intussusception three inches long was found at the ileo-cecal valve. In another case (to show the value of the passage of a slight amount of blood as a diagnostic sign) no tumor could be felt on examination under chloroform, but at operation an intussusception was found extending from the ileo-cecal valve through the ascending, transverse and into the descending colon.

Drs. Fruitnigh and Winters spoke of the value of hydrostatic pressure, the latter, however, relating a case where, after reduction, the trouble returned, and the child quickly collapsed and died.

Dr. Jacobi spoke of the height from which hydrostatic pressure should be made, and mentioned  $1\frac{1}{2}$  feet as the limit, and spoke of the danger of injuring the fragile intestines if too much pressure was used.

Dr. Reteh in reply did not advocate this method of treatment. If slight pressure failed, it should not be increased. Surgical opinion was strongly opposed to it, but medical opinion not nearly so much. In his case the axes of the two pieces of intestines happened to be the same, otherwise they would have been pressed more tightly together.

## Book Review.

*A Text-Book of Obstetrics.* By BARTON COOKE HIRST, M.D.,  
Professor of Obstetrics in the University of Pennsylvania.  
W. B. Saunders, Publisher, Philadelphia.

Though there are many excellent works on obstetrics, and many of them new, there is still room for another, especially when it is written by one qualified by years of constant practice of his special line, as an attendant at the large hospitals, as a teacher in the clinics and as a lecturer and professor in the university, and as a consultant with a wide range of experience. In "A Text-Book of Obstetrics" the author has been able to find new and practical methods of writing, describing, and illustrating, which are both pleasing and eminently instructive. By omitting much of the padding so common in text-books, he has conferred benefits upon his readers. The straightforward brevity of his diction commends itself both to the student who is working up the subject and to the practitioner who wishes to refresh his mind by a study of the most recent and accepted methods. Where all is so excellent it seems almost presumptuous to criticise, but there are some points upon which we do not agree.

Regarding anesthesia his preference is for ether, which he says is "an efficient, convenient, and satisfactory agent." I have found it so only in a comparative way, and can only think that those who use it in obstetrical practice miss very much, as chloroform is so much more convenient, efficient, safe and satisfactory. In preventing perineal rupture its rapid action enables one to control violent expulsive efforts better than other agents.

In the chapter on labor there are many valuable hints, and his remarks on episiotomy, cutting the cord, after-pains, involution of uterus, mammary evolution, rest and quiet, urination, catheterization, etc., are especially worthy of perusal.

In treating the various faulty presentations, all is made very clear, both by words and by illustrations. If I would offer any remark it would be that I do not think that stress enough is laid upon the value of complete anesthesia whilst the position is changed by the hand in the uterus.

In the treatment of puerperal sepsis we have a very thorough and comprehensive view, and the subject of serum-therapy is thoroughly dealt with. He makes it clear that "the anti-streptococcal serum has no antagonistic power over other micro-organisms, and that the results of the serum-therapy for puerperal infection have not been, as yet, at all encouraging." On the whole the author has reason to be proud of having presented to the profession a book which is eminently practical, true and scholarly, one to be treasured amongst the leading works of the day.

## Selections.

---

### Serumtherapy in Malignant Endocarditis.

Moritz's *St. Petersburg medicinische Wochenschrift* says that the mortality in this condition is at least 80 per cent.; that all sorts of medications have been tried, but they all failed; he therefore determined to try the effect of antistaphylococcus serum. A case of typical endocarditis, with a temperature-chart resembling that of the malignant form, came under his observation, and injections were used. The man recovered so far as the pyemic symptoms were concerned, and it was noticed that after each injection of the serum there was improvement in the temperature.—*Univ. Med. Mag.*

### Oil in Urinals.

It has been found that if urinals are coated with heavy oil, the urine leaves no traces or odor as it runs off (*Journ. d'Hygiene*). The 178 public urinals in Vienna are treated in this way, with satisfactory results, saving the city \$30 a year for the water supply of each. Many other European cities have already adopted the use of oil for this purpose. The urinal is scrubbed with a broom and plenty of water once a week or fortnight. When it is quite dry it is painted with thick mineral oil, obtained by distilling petroleum. Another system has a permanent syphon supply of oil.—*Journ. Amer. Med. Assn.*

### The Menopause and the Kidneys.

Dr. Le Gendre (*Gazette des Hôpitaux*), as a result of many observations, concludes that the kidney is often affected by the menopause. In some women the menopause, or the diminution or retardation of the menstrual flow, is capable of producing a renal congestion of varying intensity, which manifests itself in different ways—sometimes by a diminished secretion of urine; at other times by slight albuminuria, or hematuria, lumbar pain, nausea, vomiting, and severe headache. Such symptoms can be relieved by diuretic treatment. If a chronic nephritis pre-exists, the menopause may cause the appearance of severe symptoms.—*Med. Record.*

### Lactophenin as a Hypnotic.

A. Christiani (*Il Manicomio Moderno*) recommends the use of lactophenin as a hypnotic. He gives it in doses of from 15 to 45 gr. suspended in sweetened mucilage in the evening one

hour after food. He has employed it in over 200 cases of insanity accompanied by insomnia, and concludes that it has a hypnotic action which is certain, rapid, intense, prolonged, and harmless. The sleep which it produces is deep, calm and restorative, and lasts generally from four to nine hours. Its use is not followed by any unpleasant phenomena, such as headache and malaise. The drug has no cumulative action. It may be safely used even when the patient's physical condition is weak. Like other hypnotics it has failed to act in certain cases, and in some in which at first it was successful it has after a time entirely lost its power. He considers that it is the hypnotic *par excellence* in the insomnia of the insane, accompanied by serious involvement of the physical health in any form.—*Brit. Med. Journ.*

#### Instrumental Perforation of the Uterus.

Dr. H. Queisner (*Centbl. f. Gynäk.*) reports the following interesting case. Under anesthesia an adherent retroflexed uterus was freed from its adhesions and replaced in its normal position by the aid of the finger introduced into the uterine cavity. With the object of determining the depth of the uterine cavity a sound was passed, and found to enter a distance of four inches. The irrigating catheter of Fritsch was next inserted, and was easily pushed in for nearly two-thirds of its length. With the hand applied over the abdomen externally the point of the catheter was readily felt. There was no question of the existence of a perforation in the uterine wall. All further manipulation was suspended, the uterine canal was packed with iodoformized gauze, an ice-bag applied to the hypogastrium, and opium suppositories ordered. On the fifth day the patient left her bed and on the eighth day she was discharged after the introduction of a Hodge pessary.—*The Post-Graduate.*

#### Ehrlich's Diazo Reaction in Urine.

Krokiewicz (*Wiener klinische Wochenschr.*), after an examination of eleven hundred and five different cases, in which he made sixteen thousand one hundred and sixty-seven tests for Ehrlich's diazo reaction, draws the following conclusions: In diseases of the kidneys, not due to toxic medicaments containing coloring matters, it is never found. In carcinoma of the stomach, liver, esophagus, rectum, pancreas, and uterus the reaction is negative; but in primary carcinoma of the ovaries it is positive. When found in pulmonary tuberculosis the disease runs a short and fatal course. This rule holds good also in the incipient stages. Albuminuria and intestinal ulcers in phthisis have no effect on the reaction. The test is negative in

phthisis when complicated with nephritis. In tuberculosis of glands or mucous membranes the reaction is occasionally found. It is constant in miliary tuberculosis. In typhoid it is found in the mildest attacks in the first and second periods of the disease. As long as the diazo reaction is present in urine, typhoid patients cannot be considered convalescent. If in convalescence of typhoid the reaction sets in, it is generally a sure sign of a relapse. The author recommends the test on account of the prognostic value in typhoid and tuberculosis.—*Med. Record.*

### The Anaphrodisiac Action of Thyroidin.

Anaphrodisiacs are not greatly in demand in therapeutics, though various drugs are known to exert incidentally a depressing effect on the genital functions. According to Dr. Riviere, of Lyons, thyroidin is one of the latter group, and he reports two typical cases of men who sought relief from exaggerated obesity in the thyroid treatment. They both lost weight very rapidly under the influence of the drug, but observed with surprise, not unmixed with apprehension, that the sexual function had fallen completely into abeyance. This condition persisted for some time after the cessation of the treatment, though the function was eventually restored. It is suggested that this "therapeutical castration" may possibly help to explain the inhibitory influence exerted by the gland on the growth of uterine myomata and especially on the hemorrhage which their presence occasions. On the same lines there is reason to believe that thyroidin may prove useful in the treatment of prostatic patients whose troubles are due to congestion of the genito-urinary apparatus.—*Med. Press and Circular.*

### A New Parasite in Bloody Pleuritic Exudation.

Wilke (*Muench. med. Wochenschr.*) reports the case of a soldier admitted to the lazaretto, January 8th, 1898, the patient having been taken ill eight days previously. He complained of a cough, pain in the left side, loss of appetite, considerable debility, and had a temperature of 38° C. (100.4° F.) The physical signs of pleurisy with effusion were observed on the left side. These signs soon showed an increase of the effusion, and on the night of the 12th the patient was seized with a violent chill, the pain in the chest becoming at the same time much accentuated. Aspiration was performed on the 17th, resulting in the withdrawal of a thick purulent and sanguinolent exudate emitting an evil odor. On microscopical examination there was discovered among numerous leucocytes and bacillary organisms, a somewhat elongated body, in some instances presenting a rounded or fusiform enlargement at the

anterior extremity. These bodies traversed the visual field rapidly and with a serpentine motion. The movements were very quick and lively, but became slower little by little as the pus became cooler. Cultures of the organisms reacted only as streptococci. The author was unable to refer these parasites to any known species. He is satisfied, however, that they were not bacteria. Certain forms among them might be counted as spirilla, while those having enlarged extremities might be regarded as occupying a mean between the spirilla and the protozoa.—*The Post-Graduate*.

#### Iodide of Arsenic in Scrofula.

Dr. S. Saint-Philippe (*Journ. de Méd. de Bordeaux*, June 10th : *Gazette hebdomadaire de Méd. et de Chir.*, November 6th) recommends the following :

℞ Iodide of arsenic . . . . . 7½ grains ;  
Distilled water . . . . . 750 minims.

M. Dissolve cold.

Five, ten, twenty or even thirty drops may be taken in divided doses through the day. Ten drops contain about fifteen one-hundredths of a grain (one centigramme).—*N. Y. Med. Journ.*

#### Diuretic in Ascites and Edema from Bright's Disease.

℞ Copaiba resin . . . . . gr. x.  
Diluted alcohol . . . . . ℥ xv.  
Spirits of chloroform . . . . . ℥ x.  
Syrup of ginger . . . . . ℥ xl.  
Mucilage of acacia . . . . . ℥ lxxx.  
Water . . . . . q.s. ad ʒ i.

—*Westminster Hospital*.

#### Prescriptions for Acne.

The following prescriptions are given in the *Klinische Therapeutische Wochenschrift* :

℞ Pure resorcin . . . . . ½ drachm.  
Zinc oxide . . . . . 40 grains.  
Terra silica . . . . . 7 grains.  
Benzoyated lard . . . . . 2 drachms.

Apply to the part twice a day.

Or,

℞ Beta-naphthol . . . . . 2½ drachms.  
Precipitate sulphur . . . . . 2 ounces.  
Vaseline and soft soap, of each 1 ounce.

This is to be rubbed on the face for fifteen or twenty minutes



daily and afterwards to be removed and the part dusted with talcum powder; or we may use,

℞ Precipitate ointment, 1 drachm.  
Subnitrate of bismuth,  $\frac{1}{2}$  drachm.  
Ichthyol, 30 grains.  
Vaselin, 6 drachms.

Apply at night.

—*Therapeutic Gazette.*

### “Surgical Interference” or “Surgical Intervention”?

We have never understood why authorities in surgery use the word “interference” when speaking of surgical or operative treatment. When a surgeon performs an operation for the correction of a deformity, the mitigation of pain or the saving of life, does he mean to say that he interferes? If it be interference, then he is culpable; but certainly no operator will plead guilty to the charge of doing meddling surgery, and the inevitable conclusion is that the term “surgical interference” is a misnomer. Whenever we read it in text-books, or in current literature, we feel like substituting the word *intercession* for “interference,” using the word *intervention* in the sense of interposition, or, better still, mediation—a coming between for a friendly purpose. The word *interference* suggests the idea of collision, clashing, opposition, officiousness, intermeddling, etc. According to Webster, “A man may often *interpose* with propriety in the concern of others; he can never *intermeddle* without being impertinent or officious; nor can he *interfere* without being liable to the same charge, unless he has rights which are interfered with.” Let us see what Trench has to say. We quote: “In our practical use, *interference* is something offensive. It is the pushing in of himself between two parties on the part of a third who was not asked, and is not thanked for his pains, and who, as the feeling of the word implies, had no business there; while *interposition* is employed to express the friendly, peace-making mediation of one whom the act well became, and who, even if he was not specially invited thereunto, is still thanked for what he has done.” A few days ago we suggested the improved phraseology to two of our surgical friends, both of whom are teachers of surgery and liberal contributors to surgical literature. They agreed with us that the point was well taken, and announced it as their intention to adopt the suggestion. Speaking for ourselves, this journal will hereafter use the term surgical *intervention* instead of surgical interference, and we shall hope to see its general adoption by surgical writers.—*Richmond Journ. of Practice.*