

DOMINION  
MEDICAL MONTHLY  
AND ONTARIO MEDICAL JOURNAL.

EDITED BY  
BEATTIE NESBITT, B.A., M.D., F.C.S. (LOND.)

VOLUMES XII AND XIII.  
JANUARY TO DECEMBER. 1899

TORONTO:  
OFFICE OF THE DOMINION MEDICAL MONTHLY.  
1899.



# INDEX TO VOLUMES XII. AND XIII.

	PAGE	PAGE	
Abdominal Surgery, Two Months' Work in General Gynecology, and. Vol. XII. ....	129	Association Meeting, Canadian. Vol. XIII. ....	167
Another Phase of Hospital Abuse. Vol. XII. ....	39	Accident Insurance Companies and the Emergency Hospital. Vol. XIII. ....	169
Abortifacients. Vol. XII. ....	45	Abscess, A Case of Perityphlitic. Vol. XIII. ....	189
Atropine upon the Urinary Secretions, Action of. Vol. XII. ....	47	Abscess, A Case of Large Axillary. Vol. XIII. ....	311
Apologia, The Rev. Mrs. Eddy's. Vol. XII. ....	83	Bread for Diabetic, A New. Vol. XII. ....	32
Acne Simplex, Treatment of. Vol. XII. ....	85	Bacteria Upon the Toxicity of Strychnine, Influence of. Vol. XII. ....	47
Antiseptics, Gastric and Intestinal. Vol. XII. ....	86	Blood Changes After Experimental Thyroidectomy. Vol. XII. ....	48
Antidotal Action of Pulped Nervous Tissue upon Strychnine. Vol. XII. ....	87	Board of Health, Provincial. Vol. XII. ....	61
Appendicitis and Renal Colic. Vol. XII. ....	92	Bismutan. Vol. XII. ....	107
Auto-Intoxication in Epilepsy. Vol. XII. ....	95	Blood-Serum of Convalescents in the Treatment of Typhoid Fever, The. Vol. XII. ....	144
Anaphrodisiac Action of Thyreoidin, The. Vol. XII. ....	98	Bicycling. Vol. XII. ....	148
Active Principle of the Suprarenal Capsule, The Chemical Nature of the. Vol. XII. ....	101	Bacillus Typhi Abdominalis, A Claim for Priority in Stating the Presence of, in the Gall-Bladder. Vol. XII. ....	163
Absorptive Power of the Skin. Vol. XII. ....	107	Bronchitis. Vol. XII. ....	218
Antitoxic Power of the Organs Toward Strychnine. Vol. XII. ....	108	Bacillus, The Timothy. Vol. XII. ....	310
Anthrax Bacilli, Venous Congestion and its Germicidal Action upon, in the Subcutaneous Tissues. Vol. XII. ....	145	Bacterial Poisons, The Influence of the Spleen in Destruction of. Vol. XII. ....	313
Abortion, Practising for a Living. Vol. XII. ....	151	Berberin, in the Treatment of Leucemia. Vol. XII. ....	324
Appendicitis, Toxicity of. Vol. XII. ....	154	Bacterial Poisons and Intestinal Putrefaction. Vol. XIII. ....	50
Amylium Nitrosium Carbonisatum. Vol. XII. ....	161	Bladder Affections, Trophic, after Gynecological Operations. Vol. XIII. ....	88
Acoine. Vol. XII. ....	161	Bacillus of Cancer, The. Vol. XIII. ....	97
American Year Book of Medicine and Surgery. Vol. XII. ....	165	Biological Exhibit, The. Vol. XIII. ....	161
Acne Vulgaris and its Rational Treatment. Vol. XII. ....	169	Bacteriology in Medicine and Surgery. Vol. XIII. ....	325
Aneurism, Subcutaneous Injections of Solutions of Gelatine in. Vol. XII. ....	188	Bacillus Typhosus in the Gall-Bladder Eighteen Years After an Attack of Typhoid Fever. Vol. XIII. ....	309
Antitetanus Serum, Intracerebral Injection of. Vol. XII. ....	202	Certain Points of Interest in Phthisis. Vol. XII. ....	25
Anesthesia, Safety in. Vol. XII. ....	204	Clinical Investigations on the Action and Use of Heroin. Vol. XII. ....	49
Anesthetics, Pure. Vol. XII. ....	205	Chemical Nature of the Active Principal of the Suprarenal Capsule, Further Observations on the. Vol. XII. ....	68
Adrenal Extract, Action of the, upon the Eye. Vol. XII. ....	218	Contributory Negligence. Vol. XII. ....	88
Annual International Medical, 1899. Vol. XII. ....	222	Cystinuria, A Case of. Vol. XII. ....	93
Antistreptococic Serum, A Case of Facias Erysipelas Treated with. Vol. XII. ....	257	Clinical and Bacteriological Experiments with Holo-cain. Vol. XII. ....	104
Antitoxin Treatment of Tetanus. Vol. XII. ....	261	Casanthrol. Vol. XII. ....	108
Addison's Disease in Children. Vol. XII. ....	263	Cholin and Neurin, On the Presence of, in the Intestinal Canal During its Complete Obstruction. Vol. XII. ....	113
Artificial Ischemia, Local Anesthesia and. Vol. XII. ....	263	Castration of the Idiots. Vol. XII. ....	149
Assaults in the South, The. Vol. XII. ....	267	Claim for Priority in Stating the Presence of the Bacillus Typhi Abdominalis in the Gall-Bladder. Vol. II. ....	153
Adrenals, The Active Substances in the. Vol. XII. ....	273	Chorea, Oil of Gaultheria in. Vol. XII. ....	155
Alcohols, Acute Poisoning with Various. Vol. XII. ....	276	Cancer of the Stomach, Nutrient Enema in. Vol. XII. ....	155
Arthritis Deformans, Microbes in Chronic. Vol. XII. ....	309	Country Houses, Sanitary Arrangements for. Vol. XII. ....	181
Anesthetics, Local. Vol. XII. ....	318		
Atlases, Saunder's Medical Hand. Vol. XII. ....	327		
Anatomy of the Central Nervous System of Man and of the Vertebrates in General, The. Vol. XII. ....	328		
Antipyrin, Skin Eruptions Caused by. Vol. XIII. ....	42		
Aspirin, A New Salicylic Preparation. Vol. XIII. ....	49		
Appendicitis, Treatment of. Vol. XIII. ....	57		
Anencephalus. Vol. XIII. ....	65		
Adult Monotrematous Woman, An. Vol. XIII. ....	99		
Appendix, Failure to Find the. Vol. XIII. ....	99		

	PAGE		PAGE
Cerebro-Spinal Fluid in the Human Subject, The. Vol. XII .....	195	Dawson City. Vol. XIII.....	107
Chemical Combination of the Tetanus Poison with Nerve Substance. Vol. XII .....	217	Definition of the "Pathics." Vol. XIII.....	164
Croupous Pneumonia, Treatment of, with Silver Nitrate. Vol. XII .....	218	Drawbacks of Orthoform. Vol. XIII.....	165
Children, Addison's Disease in. Vol. XII.....	263	Diarrhen, Infant Feeding and Infantile. Vol. XIII.....	187
Chlorhydrines, Pharmacology of the. Vol. XII.....	272	Diseases of the Kidney Amenable to Surgical Treatment. Vol. XIII.....	221
Cerebellum, The Localization and Symptoms of Disease of the, Considered in Relation to its Anatomical Connections. Vol. XII .....	208	Dr. Druff and Baldness, Lassar's Treatment for. Vol. XIII.....	200
Common Cause of Crying in the New-Born, A. Vol. XII .....	311	Doctors, Druggists and Departmentals. Vol. XIII.....	317
Cold Water Treatment of Febrile Conditions, The. Vol. XII.....	320	Expert Testimony. Vol. XII.....	36
Circulation, Action of Piperidin and Adrenal Extract upon the. Vol. XII.....	323	Electrolytic Dissociation, Theory of. Vol. XII.....	49
Cyclopedia of Practical Medicine, Annual and Analytical. Vol. XII.....	228	Epilepsy, Auto-Intoxication in. Vol. XII.....	95
Canadian Medical Association. Vol. XIII.....	32	Effect of Alkalies on Gastric Secretion, The. Vol. XII.....	98
Cancer of the Uterus, The Prevention and Treatment of the. Vol. XIII.....	41	Electrical Conductivity, Molecular Concentration and. Vol. XII.....	104
Cholelithiasis, Microbe Origin of. Vol. XIII.....	43	Ephthelioma of the Face, Treatment of, with Methylene Blue. Vol. XII.....	106
Cod Liver Oil. Vol. XIII.....	51	Experimental Study of Fat Starvation, with Especial Reference to Production of Serous Atrophy of Fat. Vol. XII.....	152
Choline and Neurine, On the Physiological Action of. Vol. XIII .....	70	Enterocolitis, Picric Acid in the Treatment of. Vol. XII.....	163
Cancer, Nerve Effects of. Vol. XIII.....	36	Elbow, Old Dislocation of. Vol. XII.....	193
Croup, Suffocating Laryngitis in. Vol. XIII .....	95	Experimental Researches on the Thymus. Vol. XII.....	216
Cancer, The Bacillus of. Vol. XIII.....	97	Eraache. Vol. XII.....	219
Combination of Ichthyol and Creosote, A. Vol. XIII.....	98	Epididymitis, Suppurative, after Typhoid Fever. Vol. XII.....	262
Case of Dr. A. H. Garratt, et al. Vol. XIII .....	103	Expectoration from the Lungs, Smegma Bacilli in the. Vol. XII.....	270
Canadian Medical Association Meeting. Vol. XIII.....	113, 157	Experimental Tabes. Vol. XII .....	312
Cardiac Arrhythmia Observed by the Roentgen Rays. Vol. XIII.....	152	Eye, Diseases of the. Vol. XII.....	328
Curious Pocket Piece, A. Vol. XIII.....	152	Ear, Nose and Throat, Diseases of the, and Accessory Cavities. Vol. XII.....	328
Chloride of Zinc or Curette in Chronic Metritis. Vol. XIII.....	155	Epitome of the History of Medicine, An. Vol. XII.....	330
Case of Perityphlitic Abscess. Vol. XIII.....	180	Eyesight, Defective. Vol. XII.....	330
Collective Reports on Glycerinized Vaccine Lymph. Vol. XIII.....	257	Exfoliation, A Strange Case of. Vol. XIII.....	66
Colic. Vol. XIII.....	304	Early Diagnosis of Pregnancy, The. Vol. XIII.....	80
Diabetics, A New Bread for. Vol. XII.....	32	Enteric Fever, Green Stools in. Vol. XIII.....	95
Diet for the Sick. Vol. XII.....	53	Emergency Hospital, Accident Insurance Companies and the. Vol. XIII.....	169
Dry Labor. Vol. XII.....	91	Exercise of Infants. Vol. XIII.....	303
Diazo-Reaction, The Nature of. Vol. XII.....	94	Female Sexual Organs, Relation Between the Thyroid Gland and the. Vol. XII.....	47
Drawing and Modelling in the Study of Osteology, The Value of. Vol. XII.....	97	Fractures and Dislocations, A Treatise on. Vol. XII.....	109
Dental Septicemia of the Antrum.—Two Cases with Obscure Symptoms. Vol. XII.....	134	Fat Starvation, An Experimental Study of, with Especial Reference to Production of Serous Atrophy of Fat. Vol. XII .....	152
Dionin, Action and Use of. Vol. XII.....	163	Formalin for Sweating Feet. Vol. XII .....	154
Drugs, Action of, on the Tracheal Secretion. Vol. XII.....	274	Facias Erysipelas, A Case of, Treated with Anti-Streptococcic Serum. Vol. XII.....	257
Diphtheria, The Failure of Antitoxine in the Treatment of. Vol. XII.....	285	Feiner's Treatment of Hyperchlorhydria. Vol. XII.....	261
Diseases, Nervous and Mental. Vol. XII.....	327	Febrile Diseases, Nourishment in Acute. Vol. XII.....	271
Defective Eyesight. Vol. XII.....	330	Failure of Antitoxine in the Treatment of Diphtheria, The. Vol. XII .....	285
Dusting Powders. Vol. XIII.....	45	Febrile Conditions, The Cold Water Treatment of. Vol. XII.....	320
Degeneration of the Superior and Inferior Laryngeal and Vagus Nerve after Removing the Thyroids. Vol. XIII.....	51	Fractures. Vol. XIII.....	1
Diagnosis and Management of Pleurisy with Effusion, The. Vol. XIII.....	79	Failure to Find the Appendix. Vol. XIII.....	99
Drugs, The Untoward Effects of. Vol. XIII.....	82	Fermentation in the Stools of Sucklings. Vol. XIII.....	156
Diabetic Coma, Injections of Normal Saline Solution in. Vol. XIII.....	91	Fevers in Children—Their Significance, General Diagnostic Value, and Antipyretic Treatment. Vol. XIII.....	202
Diabetic Coma, Treatment of. Vol. XIII.....	92	General Gynecology and Abdominal Surgery, Two Months' Work in. Vol. XII .....	129
		Growth of Pediatrics, The. Vol. XII .....	37

	PAGE		PAGE
Glycolytic Enzyme in Muscle. Vol. XII	47	Insane in Private Practice, Surgical Treatment of the. Vol. XIII.	50
Gastric and Intestinal Antiseptics. Vol. XII	86	Intestinal Putrefaction, Bacterial Poisons and. Vol. XIII	50
Gastric Secretion, The Effect of Alkalies on. Vol. XII	98	Ichthyol in Renal Tuberculosis. Vol. XIII	78
Group N O II., Action of the. Vol. XII	107	Infants, Malt Soup for. Vol. XIII	81
Galvanism of the Neck in Obstinate Vomiting. Vol. XII	153	Injections of Normal Saline Solution in Diabetic Coma. Vol. XIII	98
Germ Disease, Traumatic Tetanus (or Lockjaw) as a, with Treatment by Internal Abstinence—Reports of a Case of Recovery in a Horse. Vol. XII	173	Ichthyol and Creosote, A Combination of. Vol. XIII	172
Gout, The Renal Theory of. Vol. XII	208	Insane, Surgery Among the—Its Difficulties, Its Advantages, and Its Results. Vol. XIII	187
Gonorrhoea, The Pathology of. Vol. XII	258	Infant Feeding and Infantile Diarrhoea. Vol. XIII	200
Gout, The Valuelessness of Drugs in the Treatment of. Vol. XII	269	Irregular Menstruation in Young Women Due to Anemic Conditions. Vol. XIII	207
Gynecology, Mistakes in. Vol. XII	277	Important Tips. Vol. XIII	201
General Physiology. Vol. XII	330	Internal Remedies in Surgery. Vol. XIII	291
Glycerine in Renal Calculus. Vol. XIII	48	Johns Hopkins Hospital, Clinical Notes from.—Clinic of Dr. Kelly. Vol. XII	29
Gelatin, Subcutaneous Use of. Vol. XIII	50	Internal Hemorrhoids, Treatment of. Vol. XIII	207
Gonorrhoea, The Treatment of, by Hot Water. Vol. XIII	93	Knowledge of Typhoid Fever, Advances in our. Vol. XII	154
Gout, Skin Changes in. Vol. XIII	94	Kidney, The Other, in Contemplated Nephrectomy. Vol. XIII	107
Green Stools in Enteric Fever. Vol. XIII	95	Kidney, Movable. Vol. XIII	221
Garratt, The Case of Dr. A. H., et al. Vol. XIII	103	Kidney, Diseases of, Amenable to Surgical Treatment. Vol. XIII	40
Hospital Abuse, Another Phase of. Vol. XII	39	Life, That Ye Might Have. Vol. XII	80
Heroin, Clinical Investigations on the Action and Use of. Vol. XII	49	Loomis Sanatorium, The Report of the, for the Year Ending November 1st, 1898. Vol. XII	108
Heart Disease, Diastoles of. Vol. XII	96	Liver, Action of the, Against Phosphorus Poisoning. Vol. XII	133
Hemolum Hydrargy—Isotatum as an Antisyphilitic. Vol. XII	103	Lambton Medical Association. Vol. XII	150
Holocain, Clinical and Bacteriological Experiments with. Vol. XII	104	Lactophenin, The Physiological Action of. Vol. XII	162
Have the Tonsils an Internal Secretion. Vol. XII	106	Largin. Vol. XII	203
Heart Wounds and their Prognosis. Vol. XII	201	Localization and Symptoms of Diseases of the Cerebellum Considered in Relation to its Anatomical Connections. Vol. XII	298
Hyperchlorhydria, Fleiner's Treatment of. Vol. XII	201	Leucemia, Berberin in the Treatment of. Vol. XII	324
History of Medicine, An Epitome of the. Vol. XII	330	Laryngeal and Vagus Nerve, Degeneration of Superior and Inferior, After Removing the Thyroids. Vol. XIII	51
Huron Medical Association. Vol. XIII	69	Lambton Medical Association. Vol. XIII	68
Hydrotherapy in Typhoid Fever. Vol. XIII	73	Liquid Air. Vol. XIII	90
Hysterical Blue Edema. Vol. XIII	83	Lingual Anthrax. Vol. XIII	90
Hypertrophy of the Prostate, Treatment of. Vol. XIII	151	Lawson Tail, The Death of. Vol. XIII	105
Hydatid Cysts, Operative Treatment of. Vol. XIII	153	Lymph, Collective Reports on Glycerinized Vaccine. Vol. XIII	257
Hip-Joint Disease, Sudden Dislocation in the Course of. Vol. XIII	152	Lodge Practice, The Present Status of. Vol. XIII	265
Hygiene of Transmissible Diseases. Vol. XIII	218	Laboratory Manual of Physiological Chemistry. Vol. XIII	328
Heart Disease, Menopause and. Vol. XIII	261	Lassar's Treatment for Dandruff and Baldness. Vol. XIII	296
Hospital Abuse in Toronto. Vol. XIII	263	Microbe of Contagious Pleuro-Pneumonia, The. Vol. XII	34
Hot-Air Treatment of Disease. Vol. XIII	294	Mortality Tables. Vol. XII	44
Hemorrhoids, Treatment of Internal. Vol. XIII	298	Muscle, Glycolytic Enzyme in. Vol. XII	47
Headaches and their Treatment. Vol. XIII	306	Micro-Chemistry of Nerve Cells. Vol. XII	48
Insane in Private Practice, Surgical Treatment of the. Vol. XII	1	Morphine Derivatives, Pharmacology of Some. Vol. XII	51
Inspection by Medical Officers, School. Vol. XII	43	Medical Council, The. Vol. XII	67
Influence of Bacteria Upon the Toxicity of Strychnine. Vol. XII	47	Molecular Concentration and Electrical Conductivity. Vol. XII	104
Intracerebral Injection of Antitoxin, Treatment of Tetanus by the, with Particulars of a Case Treated by this Method Followed by Recovery. Vol. XII	75	Measles, An Early Symptom of. Vol. XII	104
Intestinal Canal During its Complete Obstruction, On the Presence of Cholin and Neurin in the. Vol. XII	113		
Impending Coma Diabeticum, Preventative Treatment of. Vol. XII	163		
Influenza. Vol. XII	164		
Intracerebral Injections of Antitetanus Serum. Vol. XII	202		
Infant Feeding. Vol. XII	323		

	PAGE
Abolition of Skin Diseases. Vol. XII	170
Mixed Diets, The Effect on Salivary Digestion. Vol. XII	147
Milk Digestible, A Method of Rendering. Vol. XII.	104
Medicine and Surgery, American Year Book of. Vol. XII	165
Microbes in Chronic Arthritis Deformans. Vol. XII	260
Modern Parisian Practice. The French Therapeutics of the Period. Vol. XIII	36
Microbe Origin of Cholelithiasis. Vol. XIII	43
Malt Soup for Infants. Vol. XIII	78
Mammary Gland, Tuberculosis of. Vol. XIII.	81
Malarial Parasites, A New and Convenient Clinical Method of Staining. Vol. XIII	97
Metritis, Chloride of Zinc or Currette in Chronic. Vol. XIII	155
Malaria and the Mosquito. Vol. XIII	160
Movable Kidney. Vol. XIII	167
Menstruation, Irregular, in Young Women Due to Anemic Conditions. Vol. XIII	206
Menopause and Heart Disease. Vol. XIII	261
Medical Defence Union. Vol. XIII	260
Male Hysteria. Vol. XIII.	301
Method of Reaching the Heart Surgically. Vol. XIII.	312
Malt Soup for Children. Vol. XIII.	313
Manslaughter by "Peculiar People." Vol. XIII.	313
Materia Medica and Therapeutics. Vol. XIII.	326
Nerve Cells, Micro-Chemistry of. Vol. XII.	48
Nutrient Emema in Cancer of the Stomach. Vol. XII	155
New Antipyretics. Vol. XII.	213
New Remedies. Vol. XII	216
Nomenclature, Some Features of Medical. Vol. XII	233
Nourishment in Acute Febrile Diseases. Vol. XII.	271
Nitrites and Other Physiologically Related Substances. Vol. XII	273
New-Born, A Common Cause of Crying in the. Vol. XII.	311
Nervous and Mental Diseases. Vol. XII	327
Nervous System of Man, The Anatomy of the Central, and the Vertebrates in General. Vol. XII.	328
Nourishment, Subcutaneous. Vol. XII	47
Nerve Effects of Cancer. Vol. XIII.	80
Nose and Throat, Text-Book on Diseases of. Vol. XIII.	220
Notes on the Diagnosis of Diseases of the Stomach. Vol. XIII.	240
Nervous System and its Constituent Neurones. Vol. XIII	272
Neuroses: Functional, and their Relation to the Diseases Peculiar to Women. Vol. XIII.	312
Osteology, Drawing and Modelling in the Study of, The Value of. Vol. XII	97
Ontario Medical Library. Vol. XII.	99
Ovarian Cystic Fluid, Toxicity of. Vol. XII	103
Orthoform Emulsion. Vol. XII.	105
Orthoform. Vol. XII.	108
On Menstruation and the Ovulation in Monkeys and in the Human Female. Vol. XII.	138
Obstinate Vomiting, Galvanism of the Neck in. Vol. XII.	153
Oil of Gaultheria in Chorea. Vol. XII	155
Orthopedic Hospital, The. Vol. XII.	157
Obstetrics, A Text-Book on Practical. Vol. XII.	328
Operative Surgery, Electro-Hemostasis in. Vol. XII.	330
Orthoform New. Vol. XII	218
Ovarian Cystomata, Recent Cases from Practice Illustrating Four Types of, with Photographs. Vol. XII	223
Ontario Medical Association. Vol. XIII.	13
Ontario Medical Library Association. Vol. XIII	47
Oxyanaphor. Vol. XIII	51
Obesity, Gout and Diabetes. Vol. XIII	87
Operative Treatment of Hydatid Cysts. Vol. XII.	153
Orthoform, Drawbacks in. Vol. XIII.	155
Our Clinical Department. Vol. XIII	161
Outline of the Proposed Plan for the Economic Treatment of Pauper Inebriates, with Suggestions with Regard to Some of the Details. Vol. XIII	267
Phthisis, Certain Points of Interest in. Vol. XII	25
Physiologists at Cambridge in 1898, The Triennial International Congress of. Vol. XII	28
Pleuro-Pneumonia, The Microbe of Contagious. Vol. XII	34
Pediatrics, The Growth of. Vol. XII	87
Potassium Iodide upon the Blood of Syphilitics, Action of. Vol. XII	43
Pharmacology of Some Morphine Derivatives. Vol. XII.	51
Pocket Formulary for 1900, The "Medical News," Vol. XII	52
Progressive Medicine. Vol. XII.	53
Pamphlets Received. Vol. XII.	269, 168, 54
Pulped Nervous Tissue Upon Strychnine, Antidotal Action of. Vol. XII.	87
Pneumonia, Treatment of, with Large Doses of Digitalis. Vol. XII	102
Physiology and Pathology of the Pleura. Vol. XII.	101
Pregnant Uterus, Action of Glycerine Upon the. Vol. XII.	106
Pulmonary Gangrene, Treatment of. Vol. XII.	106
Physiology and Mental Disease, A Primer of, for Use in Training Schools, for Attendants and Nurses, and in Medical Classes. Vol. XII.	110
Prevention of Tuberculosis, The. Vol. XII.	140
Pulmonary Tuberculosis Treated with Watery Extract of Tubercle Bacilli, Report of Seventy-Eight Cases of. Vol. XII.	142
Physiological Action of Lactophenin, The. Vol. XII.	150
Practising Abortion for a Living. Vol. XII.	151
Periodic Hematuria, Tight Lacing and. Vol. XII.	151
Puerperal Glycosuria. Vol. XII.	155
Preventative Treatment of Impending Coma Diabeticum. Vol. XII.	163
Pieric Acid in the Treatment of Empero-colitis. Vol. XII.	163
Progressive Medicine. Vol. XII.	220
Pathology of Gonorrhoea, The. Vol. XII.	258
Pharmacology of the Chlorhydrines. Vol. XII.	272
Poisoning, Acute, with Various Alcohols. Vol. XII.	276
Phesin and Cosaprin. Vol. XII.	276
Physical Anti-Fat Cures. Vol. XII.	321
Piperidin and Adrenal Extract, Action of, upon the Circulation. Vol. XII.	323
Poisoning with Various Alcohols, Acute. Vol. XII.	325
Phesin and Cosaprin. Vol. XII.	325
Practical Materia Medica for Nurses. Vol. XII.	328
Prevention and Treatment of Cancer of the Uterus. Vol. XIII	41
Practical Diagnosis. Vol. XIII	52
Progressive Medicine. Vol. II. Vol. XIII.	52

	PAGE		PAGE
Physiological Action of Cholin and Neurine, On the Vol. XIII.....	70	Symptom of Measles, An Early. Vol. XII.....	104
Pleurisy with Effusion, The Diagnosis and Management of. Vol. XIII.....	70	Skin Diseases, Manual of. Vol. XII.....	110
Pregnancy, The Early Diagnosis of. Vol. XIII.....	80	Seventy-Eight Cases of Pulmonary Tuberculosis Treated with Watery Extract of Tubercle Bacilli. Report of. Vol. XII.....	112
Peptonuria in Scarlet Fever. Vol. XIII.....	93	Salivary Digestion, The Effect of Mixed Diets on. Vol. XII.....	147
Poisonous Plants. Vol. XIII.....	99	Sweating Feet, Formalin for. Vol. XII.....	154
Prostate, Treatment of Hypertrophy of the. Vol. XIII.....	151	Somebody Blundered, Vol. XII.....	153
Pelvis, Why the Undefending. Vol. XIII.....	178	Someco Medical Association, Vol. XII.....	170
Passing of Marmoreck's Serum. Vol. XIII.....	211	Sanitary Arrangements for Country Houses. Vol. XII.....	181
Progressive Medicine. Vol. III.—A Treatise on Surgery by American Authors. Vol. XIII.....	217	Some Points in the Bacteriology of Public Water Supplies. Vol. XII.....	185
Pelvic Inflammations, Treatment of, Through the Vagina. Vol. XIII.....	218	Subcutaneous Injections of Solutions of Gelatine in Aneurism. Vol. XII.....	188
Present Status of Lodge Practice. Vol. XIII.....	245	Streptococcus Serum, The Use of, With Some Reports of Cases. Vol. XII.....	193
Pauper Inebriates, Outline of the Proposed Plan for the Economic Treatment of, With Suggestions with Regard to Some of the Details. Vol. XIII.....	207	Sugar from Ashumen. Vol. XII.....	209
Pre-Tuberculous Stage, The Diagnosis of the. Vol. XIII.....	316	Syphilis, Treatment of, with Intramuscular Corrosive Sublimite Injections. Vol. XII.....	218
Principles of Surgery. Vol. XII.....	320	Skin Diseases, Ready-Reference Hand-Book of. Vol. XII.....	210
Quinine and Tannic Acid on the Uric Acid Elimination. Vol. XII.....	274	Some Features of Medical Nomenclature, Vol. XII.....	233
Report of Surgical Cases, with Special Points of Interest. Vol. XII.....	57	Severance of Several Toes, With Restoration. Vol. XII.....	260
Report of Loomis Sanatorium for the Year Ending November 1, 1898, The. Vol. XII.....	80	Smegma Bacilli in the Expectoration from the Lungs. Vol. XII.....	270
Ringworm of the Scalp, The Treatment of, by Chloride of Sodium, Vol. XII.....	154	Spleen, The Influence of the, in Destruction of Bacterial Poisons. Vol. XII.....	313
Registration, Intra-Provincial. Vol. XII.....	210	Salts, Theory of the Action of. Vol. XII.....	324
Renal Diseases, Treatment of. Vol. XII.....	215	Sexual Instinct: Its Use and Dangers as Affecting Heredity and Morals. Vol. XII.....	330
Ready-Reference Hand-Book of Skin Diseases. Vol. XII.....	219	Surgical Treatment of the Insane in Private Practice. Vol. XIII.....	3
Recent Cases from Practice, Illustrating Four Types of Ovarian Cystomata, with Photographs. Vol. XII.....	223	Skin Eruptions Caused by Antipyrin. Vol. XIII.....	42
Remedies of Schuessler, The Twelve Tissues. Vol. XII.....	327	Subcutaneous Nourishment. Vol. XIII.....	47
Renal Calculus, Glycerine in. Vol. XIII.....	48	Subcutaneous Use of Gelatine. Vol. XIII.....	50
Relation of Thyroids and Bile. Vol. XIII.....	40	Strange Case of Exfoliation, A. Vol. XIII.....	66
Retroperitoneal Lymph Cyst or Psoas Abscess, Case of Diabetes Mellitus Treated with Thyroid Gland. Vol. XIII.....	85	Sudoral Typhoid. Vol. XIII.....	75
Roentgen Rays, Cardiac Arrhythmia Observed by the. Vol. XIII.....	152	Supra-arterial Epicardial Fibroid Nodules. Vol. XIII.....	77
Rough Notes on Remedies. Vol. XIII.....	328	Scarlet Fever, Peptonuria in. Vol. XIII.....	93
Surgical Treatment of the Insane in Private Practice. Vol. XII.....	1	Sigmoid Flexure, Volvulus in—Three Operations. Vol. XIII.....	93
School Inspection by Medical Officers. Vol. XII.....	43	Skin Changes in Gout. Vol. XIII.....	94
Sexual Organs, Relation Between the Thyroid Gland and the Female. Vol. XII.....	47	Suffocating Laryngitis in Croup. Vol. XIII.....	95
Syphilitic, Action of Potassium Iodide upon the Blood of. Vol. XII.....	48	Serum Treatment of Tetanus, The. Vol. XIII.....	99
Surgical Cases with Special Points of Interest, Report of. Vol. XII.....	57	Sterilization of Instruments. Vol. XIII.....	99
Suprarenal Capsule, Chemical Nature of the Active Principle of the, Further Observations on the. Vol. XII.....	68-	Symposium on Tuberculosis at the Ontario Medical Association Meeting, The. Vol. XIII.....	101
Suppuration by Bicarbonate of Soda, The Treatment of. Vol. XII.....	92	Sudden Dislocation in the Course of Hip-Joint Disease. Vol. XIII.....	153
Salination, Substances in the Urine Causing. Vol. XII.....	105	Stools of Sucklings, Fermentation in the. Vol. XIII.....	156
Suggestions to Medical Writers: No. 2, The Manuscript. Vol. XII.....	140	Surgery Among the Insane—Its Difficulties, Its Advantages, and Its Results. Vol. XII.....	172
		Serum, Passing of Marmoreck's. Vol. XIII.....	211
		Stomach, Notes on the Diagnosis of Diseases of the. Vol. XIII.....	240
		Surgery, Internal Remedies in. Vol. XIII.....	261
		Skin-Grafting With Dried Epidermis Scales.....	308
		Suture of the Heart for Penetrating Wounds. Vol. XIII.....	309
		Sterilization of Catheters and Bougies. Vol. XIII.....	310
		Suture of Nerves. Vol. XIII.....	313
		Sugar as Food. Vol. XIII.....	319
		Saunders's Question Compend. Vol. XIII.....	328

	PAGE		PAGE
Two Months' Work in General Gynecology and Abdominal Surgery. Vol. XII .....	79	Tapeworm, Treatment of by Morphine Injection into the Parasite. Vol. XIII.....	311
Triennial International Congress of Physiologists at Cambridge in 1898, The. Vol. XII .....	28	Text-Book on the Practice of Medicine. Vol. XIII.....	325
Testimony, Expert. Vol. XII .....	30	Text-Book of Embryology for Students of Medicine. Vol. XIII.....	326
That Ye Might Have Life. Vol. XII .....	40	Urinary Secretion, Action of Atropine Upon the. Vol. XII .....	47
Tables, Mortality. Vol. XII .....	44	Uremic Insanity. Vol. XII .....	89
Thyroid Gland and the Female Sexual Organs, Relation Between the. Vol. XII .....	47	Uncontrollable Vomiting of Pregnancy. Vol. XII.....	90
Thyreoidectomy, Blood Change After Experimental. Vol. XII .....	48	Urine, Substances in the, Causing Salivation. Vol. XII .....	105
Theory of Electrolytic Dissociation. Vol. XII .....	49	Uro-Diagnosis of Typhoid Fever. Vol. XII .....	107
Tetanus, Treatment of, by the Intracerebral Injection of Antitoxin, with Particulars of a Case Treated by this Method, Followed by Recovery. Vol. XII .....	75	Urea as a Diuretic. Vol. XII.....	109
Thyroid Therapy, The. Vol. XII .....	96	Uremia, The Treatment of, by Subermal Injections of Decinormal Saline Solution. Vol. XII .....	217
Tannopin, Action of. Vol. XII .....	103	Uric Acid Elimination, Quinines and Tannic Acid on the. Vol. XII .....	276
Toxicity of Ovarian Cystic Fluid. Vol. XII .....	103	Untoward Effects of Drugs, The. Vol. XIII.....	82
Typhoid Fever, Uro-Diagnosis of. Vol. XII.....	107	Vomiting of Pregnancy, Uncontrollable. Vol. XII.....	90
Twentieth Century Practice. Vol. XII .....	109	Venal Congestion and its Germicidal Action upon Anthrax Bacilli in the Subcutaneous Tissues. Vol. XII .....	145
Tuberculosis, The Prevention of. Vol. XII .....	140	Valuelessness of Drugs in the Treatment of Gout, The. Vol. XII .....	259
Typhoid Fever, The Blood-Serum of Convalescents in the Treatment of. Vol. XII .....	144	Volvulus of Sigmoid Flexure. Vol. XIII .....	93
Tight Lacing and Periodic Hematuria. Vol. XII .....	151	Vis Medicatrix Spiritus Sancti as a Cure for Erotic Neurasthenia, The Therapeutics of Conversion, or the. Vol. XIII.....	275
Toxicity of Appendicitis. Vol. XII .....	154	Working Tools of the Craft, The. Vol. XII .....	159
Triphenin. Vol. XII .....	164	Water Supplies, Some Points in the Bacteriology of Public. Vol. XII .....	185
Traumatic Tetanus (or Lockjaw) as a Germ Disease, with Treatment by Internal Antisepsis—Reports of a Case of Recovery in a Horse. Vol. XII.....	173	Wounds, Heart, and Their Prognosis. Vol. XII.....	201
Typhoid Fever, Advances in our Knowledge of. Vol. XII .....	207	Where Shall We Send our Tubercular Patients.—The Health Resorts of the West and South-West. Vol. XII.....	242
Thymus, Experimental Researches on the. Vol. XII.....	216	Welcome Club and Institute, The. Vol. XIII.....	106
Tetanus Poison, Chemical Combination of the, with Nerve Substance. Vol. XII .....	217	Why the Undefending Pelvis. Vol. XIII.....	178
Tubercular Patients, Where shall we send our—The Health Resorts of the West and South-West. Vol. XII .....	242	White and Dark Meat in Sick Diet, The Relative Value of.....	307
Tetanus, Antitoxine Treatment of. Vol. XII.....	261	Wounds, Suture of the Heart for Penetrating. Vol. XIII.....	309
Typhoid Fever, Suppurative Epididymitis after. Vol. XII .....	262	X-Rays Upon the Heart, Action of the. Vol. XII.....	105
Tracheal Secretion, Action of Drugs on. Vol. XII.....	274	Zola. Vol. XII.....	315
Tropin, Action of, and the Tropicines. Vol. XII.....	276		
Timothy Grass Bacillus, The. Vol. XII .....	310	MONTHLY HEALTH REPORTS—	
Theory of the Action of Salts. Vol. XII .....	324	Vol. XII.....	42, 156, 212, 266, 314
Text-Book on Practical Obstetrics. Vol. XII .....	325	Vol. XIII.....	54, 100, 210, 262, 314
Twentieth Century Practice. Vol. XII .....	328	PERSONALS—	
Thyroid and Bile, Relation of. Vol. XIII.....	49	Vol. XII.....	112
Tuberculosis, Ichthyol in Renal. Vol. XIII.....	50	OBITUARY—	
Typhoid Fever, Hydrotherapy in. Vol. XIII.....	73	Dr. J. E. Graham. Vol. XIII.....	53
Tuberculosis of the Mammary Gland. Vol. XIII.....	81	CORRESPONDENCE—	
Trophic Bladder Affections after Gynecological Operations. Vol. XIII .....	88	Intra-Provincial Registration. Vol. XII.....	210
Tetanus, The Serum Treatment of. Vol. XIII.....	96	REPRINTS RECEIVED—	
Tuberculosis, The Symposium on, at the Ontario Medical Association Meeting. Vol. XIII .....	101	Vol. XII., 330. Vol. XIII.....	112, 166, 220, 274, 325
Toronto Clinical Society. Vol. XIII.....	182, 253, 283	NEWS ITEMS—	
Treatment of Pelvic Inflammations Through the Vagina. Vol. XIII.....	218	Vol. XIII.....	107, 163, 214, 269, 321
Transmissible Diseases, The Hygiene of. Vol. XIII.....	218		
Text-Book on Diseases of the Nose and Throat. Vol. XIII.....	220		
Tips, Important. Vol. XIII .....	260		
Therapeutics of Conversion, or the Vis Medicatrix Spiritus Sancti as a Cure for Erotic Neurasthenia. Vol. XIII.....	257		



**Contents**

ORIGINAL ARTICLES—	PAGE	EDITORIAL ABSTRACTS—	PAGE
The Surgical Treatment of the Insane in Private Practice . . . . .	1	Influence of Bacteria Upon the Toxicity of Strychnine—Glycolytic Enzyme in Muscle—	
Two Months Work in General Gynecology and Abdominal Surgery . . . . .	19	Action of Atropine Upon the Urinary Secretion—Relation Between the Thyroid Gland and the Female Sexual Organs . . . . .	47
<b>SPECIAL SELECTIONS—</b>			
Certain Points of Interest in Phthisis . . . . .	25	Action of Potassium Iodide Upon the Blood of Syphilitics—Micro-Chemistry of Nerve Cells—Blood Changes After Experimental Thyroidectomy . . . . .	48
The Triennial International Congress of Physiologists at Cambridge in 1898 . . . . .	28	Clinical Investigations on the Action and Use of Heroin—Theory of Electrolytic Dissociation	49
A New Bread for Diabetics . . . . .	32	Pharmacology of Some Morphine Derivatives . . . . .	51
The Microbe of Contagious Pleuro-Pneumonia . . . . .	34		
Expert Testimony . . . . .	36	<b>PHYSICIANS' LIBRARY—</b>	
The Growth of Pediatrics . . . . .	37	The Medical News Pocket Formulary for 1899 . . . . .	52
Another Phase of Hospital Abuse . . . . .	39	Diet for the Sick . . . . .	53
<b>CORRESPONDENCE—</b>			
"That Ye Might Have Life" . . . . .	40	Progressive Medicine . . . . .	53
<b>MONTHLY HEALTH REPORT . . . . .</b>			
	42	Pamphlets Received . . . . .	54
<b>EDITORIAL—</b>			
"School Inspection by Medical Officers" . . . . .	43		
"Mortality Tables" . . . . .	44		
Abortionists . . . . .	45		

(TWO SIZES)  
50¢-\$1.00

**UNRIVALLED AS AN ANTIPRURITIC, ANTISEPTIC, ANTIPHLOGISTIC, NUTRIENT, ETC.**

(℞ Ungt Resinol ℥i-iii)

*A specific for Eczema, Pruritus Ani, and all itching troubles.*

(TWO SIZES)  
50¢-\$1.00

**A DESIDERATUM AS A VEGETABLE ALTERNATIVE, LAXATIVE TONIC AND ANTACID.**

(℞ Elix. Cascanata ℥iv-x.)

*Indicated in all skin Diseases, chronic Constipation and disorders of Digestion etc.*

(PRICE)  
25¢.

**AN ABSOLUTELY PURE NON-IRRITATING, EMOLLIENT AND PRESERVATIVE DETERGENT.**

(℞ Sapo Resinol one bar)

**THE BEST SOAP FOR THE SKIN, THE HAIR, SCALP ETC.**

*For sale by all Druggists, or sent on receipt of price.*

~RESINOL CHEMICAL CO.~ BALTIMORE, MD.~

## List of Advertisers

	PAGE		PAGE
Angier Chemical Co.	15	McKesson & Robbins	5
Allen & Hanburys, Limited	Outside Back Cover	McIntosh Battery & Optical Co.	44
Abbey's Effervescent Salt	18	McGill University, Montreal	27
Armour & Company	24	Mulford Co., H. K.	1
Antikamnia Co.	7	Mellier Drug Co.	10
A., T. and Santa Fe Railroad	11		
		New York Polyclinic	39
Bovril Limited	19	New York School of Clinical Medicine	33
Breitenbach Company, M. J.	21		
Bischoff, C., & Co.	14	Oakland Chemical Co.	11
Brand & Co., Limited	8	Od Chem. Co.	32
Bausch & Lomb Optical Co.	31	Ontario Vaccine Farm	40
Buffalo University	39	Ottawa Truss Co.	20
Benger & Co.	7		
Bovine Company, The	29	Parke, Davis & Co.	Front Cover
Confederation Life Association	42	Pulvula Chemical Co.	41
Dean, Alf. E.	34	Phenique Chemical Co., The	4
Everett House, New York	40	Pond's Extract	46
Elliott Illustrating Co.	40	Pyne, A. R., M.B.	11
Ferrol Company, The	9	Rio Chemical Co.	17
Fairchild Bros. & Foster	2	Resinol Chemical Co.	3
Farwell & Rhines	39		
Fellows Syr. Hypophos. Co.	Inside Back Cover	St. Paul Association	32
Gilmour Bros. & Co	12	Scott & Bowne	25
Harvey, The G. F., Co.	46	Thompson, B. & S. H.	23
Hamill, Dr. W. E.	44		
Ives, R. H., & Co	28	Wampole, H. K., & Co	13
		Warner, Wm. R., & Co.	35, 36, 37, 38
Jackson Sanatorium	43	Walter's Sanitarium	45
Lambert Pharmacal Co.	Inside Front Cover	Willms Co. The Chas.	6
London, Geo. G.	30	Wilson, L. A., & Co.	7
Lyman Sons & Co	22	Wood, W. Lloyd	16
		Wabash Railroad	2

**GAROFEN**

Formerly Called "Gurania."

The New Vegetable  
Analgesic and Antipyretic

To take the place of Morphine Acetanilid and its many compounds. Contains no coal-tar products, nor opium or its alkaloids in any form. Reduces temperature and relieves pain with absolute certainty. Positively no cardiac depressions, debilitating or unpleasant symptoms. Supplied in powder or tablets. Sample, literature and reports mailed free of charge to physicians.

**CAMPHO-PHENIQUE POWDER**

Superior to Iodoform.

The Standard  
Dry Antiseptic Dressing

Recommended by first physicians of all countries. Sample and literature mailed free of charge to physicians.

Manufactured by \_\_\_\_\_

**Phenique Chemical Co., ST. LOUIS, MO., U.S.A.**

# DOMINION MEDICAL MONTHLY

AND ONTARIO MEDICAL JOURNAL

VOL. XII.

TORONTO, JANUARY, 1899.

No. 1

## Original Articles

No paper published or to be published elsewhere as original, will be accepted in this department.

### THE SURGICAL TREATMENT OF THE INSANE IN PRIVATE PRACTICE.

BY ERNEST HALL, M.D., L.R.C.P. (EDIN.), VICTORIA, B.C.  
Fellow of British Gynecological Society.

In the evolution of any public function, moral reformation, or political institution, the development of the individual concept is necessarily primary. Time is required for the community to become awakened, and for their desire to be voiced by parliamentary enactment. The pioneer always encounters obstacles, and he who would make history must pull against the current. Life loses much of its interest when ideals are reached, but is intensified by an effort in any noble cause. Then in the application of the principles of advanced treatment of the insane, so substantially evolved by Rohé, Hobbs, Burgess, Holmes and others, we must not expect the facilities which the public have recognized as necessary in other departments. But while we work and wait sentiment is rapidly developing, and governmental machinery is beginning to move. The Pacific Province may soon surprise her older sisters in the matter of the modern treatment of the insane, and no one realizes the great necessity of a change, and is more in sympathy with the work done in the London Asylum than is the medical superintendent of our Provincial Asylum, Dr. Bodington, through whose kind courtesy I have been enabled to prosecute what little has been done in this department in British Columbia.

Pending the equipment of surgical conveniences in the asylum, it has been necessary to remove the cases for treatment. This has



32956

been a source of great trouble and expense, principally on account of the hospitals refusing to admit this class of patients.

After a few cases had been operated upon in private houses, the Sisters of St. Anne kindly extended to me the privileges of the hospital, but the city, or Jubilee Hospital, still pursues its course of "impious stubbornness."

Up to December 20th, I have examined twenty-three insane women, and have operated upon twelve. I here submit a brief history of these cases:

CASE 1.—Mrs. McF.; aged 35; two children; no miscarriages; insane nearly three years, violent maniacal type; confined in the asylum for two years and eight months. Was considered by the authorities as hopeless; brought directly from the asylum to a private house. Examination showed cystic adherence and prolapsed ovaries. I curetted, removed appendages, convalescence normal. Seventeen days after the operation she was restored to her mental health, and now nine months after the operation has gained thirty-six pounds in weight. She has been transformed from an insane maniacal invalid to a plump and intelligent woman, and is now taking her place in her family and in society.

CASE 2.—Mrs. C., aged 57; married; several children; no history of inflammatory action; family history excellent; experienced some financial troubles; for several years has suffered from pain in the back and pelvis, and underwent treatment without relief. Melancholia developed, when she was committed to the asylum where she remained for a year. Examination made under anesthesia showed lacerated perineum laxity of the vaginal walls, but nothing else. Upon this examination I did not recommend operation. After conference with friends who desired nothing to be left undone, I concluded to explore the abdomen, and found large varicocele of both broad ligaments with calcareous deposits and cystic degeneration of the pelvic peritoneum. Appendages were removed with as much of broad ligament as possible.

Post-operative history normal, physical condition much improved, mental condition considerably better, so much so that she is managed at home, and takes some interest in domestic affairs; does considerable sewing for grandchildren, and, in fact, is better than we expected.

CASE 3.—Mrs. R., aged 52; no children. Had an attack of ovaritis fifteen years ago. Examination showed retroversion and general pelvic adhesions, insanity of a suicidal and religious type. She was in the asylum for three years. Operation, October 8th, showed adhesions of the clitoris, retention of the smegma, universal pelvic adhesions; removed left appendage; failed to find right ovary on account of dense adhesions; replaced womb. Insanity was completely cured and physical condition improved. Dr.

Howard Kelly, in his last work, speaks of removing a concretion from the dorsal surface of the clitoris in an unmarried woman of twenty-five, who was hysterical and showed signs of mental aberration.

CASE 4.—Miss C., aged 24; family history excellent; melancholia of two years following the breaking of the news of the sudden death of her brother. Examination, under anesthesia, showed pelvic organs normal. No operation advised.



CASE II.—Varicocele of broad ligaments, cysts of peritoneum, calcareous nodules.

CASE 5.—Mrs. W., aged 40; married fifteen years; no children; no miscarriages; no history of inflammation; subject to epileptic fits; suffered from Bright's disease. Confined to asylum for four months; insanity very light.

Examination under anesthesia showed undeveloped condition of the uterus. No operative treatment advised. She finally recovered and left the asylum.

CASE 6.—Mrs. J., aged 28; three children, youngest three years; no tuberculous history; several miscarriages since; suffered four years with pelvic pain; somewhat better while carrying last child. In January of this year her husband took sick with

*la grippe*, followed by pneumonia, and during his sickness patient acted as nurse, and also took share in household duties. She complained of severe pelvic pain and headache. Examination showed endometritis retroversion with great tenderness. She was placed under treatment, including Weir-Mitchell system, with no improvement. Religious melancholia appeared. As patient was growing worse I opened the abdomen, finding both ovaries enlarge and presenting cysts as large as a walnut. They were removed. Convalescence normal. The mental condition became worse; symptoms of meningitis supervened, with paralysis, strabisms, etc., with coma, and death seven weeks after the operation.

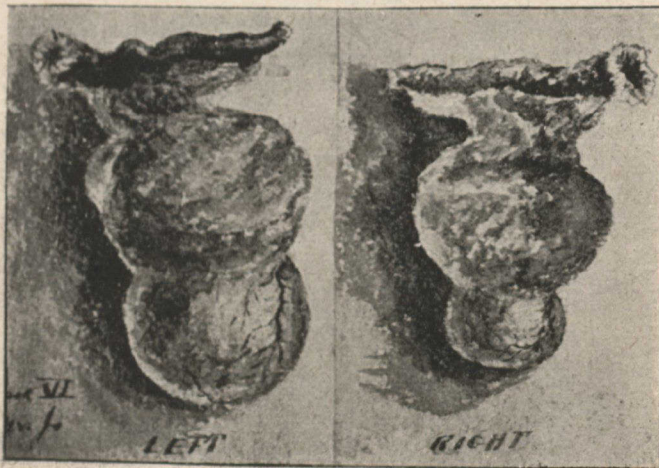


FIG. 2, CASE VI.—Enlargement of ovaries with cysts. From water-color drawing.

CASE 7.—Mrs. H., aged 45; several children; no miscarriages. Insanity of a melancholic and suicidal type, following *la grippe* and ethmoiditis. Pelvic examination show no abnormality.

CASE 8.—Mrs. W., aged 25; two children, youngest five years; miscarriage three years ago, followed by "blood poison." After recovering she suffered from pain in the side and back. On October 11th, 1897, she became unconscious, according to her own story, while washing clothes, and did not recover herself until November 24th, when she had but a few hours consciousness, relapsing into the same state as before, and remaining until December 20th of the same year. Her condition was described by her physician as "acute mania, caused by congestion of the womb." This case came under my observation in July of this

year, when I found her exhibiting definite symptoms of hysteria, with marked globus. After a few days of bromides, valeria and discipline, I examined and found a congested cervix, retroversion and enlarged ovary. With little persuasion she consented to treatment, namely, amputation of the cervix, curettage, removal of right cystic ovary and ventrofixation. Recovery complicated with stitch abscess. The patient is now free from pain, and well.

CASE 9.—Mrs. K., aged 46; several children, youngest thirteen years; had "inflammation" after childbirth. Mild insanity of twelve years duration; at first intermittent, melancholia and suicidal. Pelvic examination under anesthesia, showed perineal tear complete; left tube and ovary one mass of adhesions, possibly an old tube or ovarian abscess, very tender to touch. Operation advised, but not accepted.

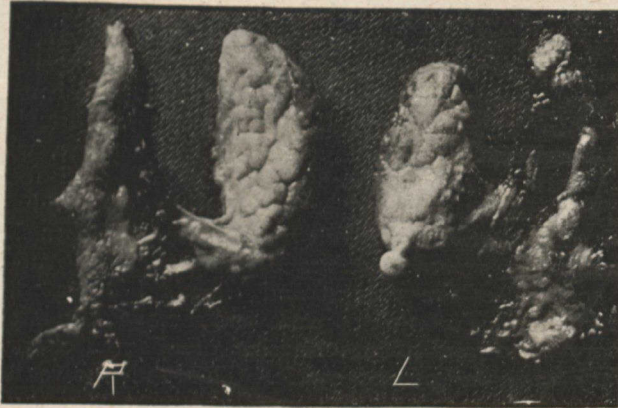
CASE 10.—Mrs. B., aged 31; family history excellent, but was considered a somewhat nervous child; two children, youngest seven years; had "inflammation" after birth of last child. Previous to and during menstruation, patient would become excessively nervous for a few days and then moderately irrational. It was found necessary to commit her to the asylum, where she remained, with occasional short intervals, for some four years. For the last six months she has been at her father's home, and appeared somewhat better. Pelvic examination shows slight perineal rupture, endometritis, enlarged and prolapsed ovary. With the full consent of the patient and friends I operated (in the Western Hospital, Toronto), curetted and removed the left appendage; ovary hard and about the size of a small cherry. The right ovary was enlarged and cystic. The tube was removed, the right ovary resected, and the small amount (chiefly cortical matter) that was left, was fitted cap-like over the stump of the ligaments and attached with gut. Post operative history normal. Mental condition improving. This patient I purposed operating upon three years ago, but the friends desired the opinion of a local surgeon, which was given adverse to mine, with the result of a temporary abandoning of the project.

CASE 11.—Mrs. J., aged 50; one child. Gave history of vaginal discharge with pelvic pain, and illness for a few months occurring three months after marriage. Two years ago she was struck on side of the head, and immediately became delirious, remaining in that condition for one week. This condition recurred monthly. Remained in the asylum fourteen months. During the intervals the patient was bright and intelligent. Examination showed no scar nor any trace of injury upon the head. Vaginal examination showed thickened right ligament with adhesions.

*Section.*—Varicocele of left serval ligament. Adhesion of uterus to rectum. Old salpingitic, adhesions. Left tube double

ostia ; ovaries cirrhotic and the left, a fibrous nodule. Adhesions separated. Appendages removed. Period between attacks lengthening and attacks less severe. The last no delirium but bad headache.

CASE 12.—Mrs. O., aged 39 ; three children—one child epileptic ; several miscarriages. After a period of financial embarrassment and ill-health, began to act unnatural, taking long walks, etc. Insomnia followed, and patient began destroying the furniture and bedclothing. After heavy hypnotics, prolonged sleep was obtained, and under tonics and quietude the patient was restored to her former condition. Pelvic examination showed laceration of perineum and deep laceration of cervix. Operative measures are under consideration.



CASE XI.—Ovaries cirrhotic, fibrous nodule, double ostia, left tube.

CASE 13.—Mrs. C., aged 42 ; several children. Kindly referred by Dr. Holden, of Victoria. Had to work hard in order to support family. Insanity of melancholic and religious type. Two week's duration.

Examination showed congested hypertrophied and lacerated cervix, lacerated perineum, and retroversion with adhesions.

Curetment, amputation of cervix, vaginal ovariectomy. Both ovaries presented adhesions, and were slightly enlarged.

The mental condition showed no improvement ; at times the patient became wildly delirious, and required to be tied down in the bed and kept under morphia.

Cul-de-sac drain was removed third day. Patient progressed favorably for five days, when temperature and pulse indicated grave disturbance.



I reopened posterior cul-de-sac and irrigated, there were a few ounces of serum, but no pus. Patient rallied for twelve hours, and died twelve days after the operation.

*Post-mortem Examination.*—The surface of the brain presented intense venous congestion; considerable fluid was also presented, but no other abnormality of these parts. Around the left broad ligament stump there was healthy lymph. The right stump was darkened in color with unhealthy looking lymph, and abnormal discoloration throughout the right pelvic veins; no evidence of peritonitis. This condition resembled septic thrombosis, and this



CASE XIII.—Ovaries slightly enlarged, showing filaments where ovaries were adherent. Photographed in Water.

opinion was reinforced by the fact that two other patients upon whom I had used the same strand of cat-gut, had infected wounds. It is to be regretted that we have not apparatus sufficient for making cultures, or this matter might have been definitely settled. However, I am disposed to think that the infection during the operation, or soon after, was at least a great factor in the causation of death.

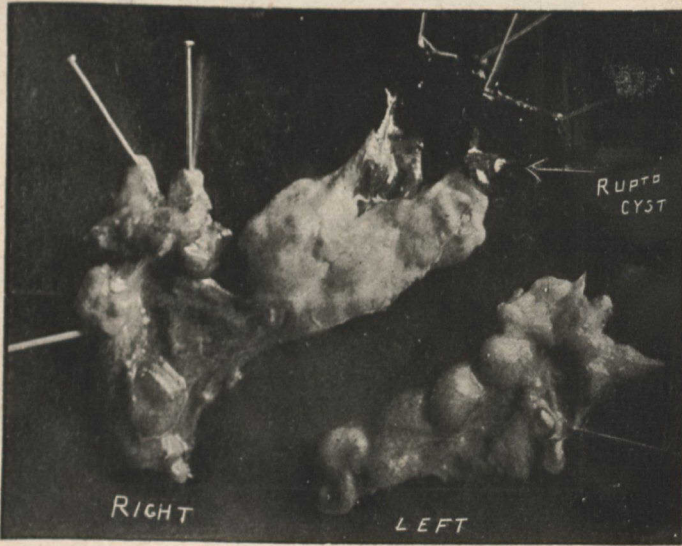
Since writing the above, knowledge has come to me of three additional deaths in the same hospital within a very limited period under the care of most skilful surgeons. The only explanation that can be given to account for these deaths is that of general infection by a most virulent case that was in both operating rooms

shortly previous. At the same time I had two other infected wounds in the same hospital, one of perineum, the other of the abdominal wall (case 18), both of which recovered.

CASE 14.—Mrs. D., aged 27; one child six years ago; was very weak for a few months following confinement; not pregnant since. Has not been strong since.

*Insanity.*—Delusions—thought her husband tried to poison her. Would run away from home.

Examination showed retroversion with adhesions. Ruptured perineum. As patient did not take an anesthetic, the conditions of the ovaries were not determined. Operation advised.



CASE XIV.—Right ovary enlarged, showing ruptured cyst tubes thickened and inflamed

Operation November 23. Curettage. Right ovary contained small cyst, as large as a walnut. Right appendage removed. Left tube removed. Ovary cystic resected and filled upon stump of ligament. Tubes were thickened.

Post-operative history normal. Has shown very little indications of any mental abnormality since. Left hospital eighteen days after operation. Cured.

CASE 15.—Mrs. J., aged 50; insane one year; committed to an asylum, and remained two months.

*Insanity.*—Delusions and abusive. Would threaten the neighbors for poisoning her dog, stealing her chickens, etc.

*History.*—One child thirteen years old; got up and caught cold, was ill for three months. One miscarriage since.

*Examination.*—Ruptured perineum. Retroversion with adhesions. The appendages could not be definitely outlined on account of the mass of adhesions.

Operation not advised, considering the patient's age and our present lack of facilities; but with proper appliances and conveniences at the asylum, I would take surgical measures in this case.

CASE 16.—Mrs. R. (kindly referred by Dr. O'Brien, of Nanaimo), aged 25; three children; no miscarriages. Two days after birth of second child became insane and committed to the asylum December 22nd, 1895, remaining eighteen months. Was greatly improved; could do housework and look after children, but did not become perfectly herself.

Two and a half months after third child was born, she became rapidly worse, and when I saw her on the 20th of November she was in condition of melancholic stupor, would not speak, but could easily be managed. Very anemic.

Under chloroform, I found cervix lacerated. Right ovary enlarged and adherent tube, left ovary apparently small. Operative measures advised and accepted.

*Operation.*—On December 3rd, at St. Joseph's Hospital, Victoria. I amputated cervix and removed the appendages. The right ovary was enlarged, cystic, and adherent to the tube by the results of previous pelvic inflammation. There were also adhesions of the left tube.

*Results.*—Physical: Convalescence normal. General nutrition improving; color much better. Mental: During the first week after the operation patient was at times very restless. Morphine was freely administered, and patient securely tied to the bed. Removed from hospital December 15th. Improving mentally, but very slowly.

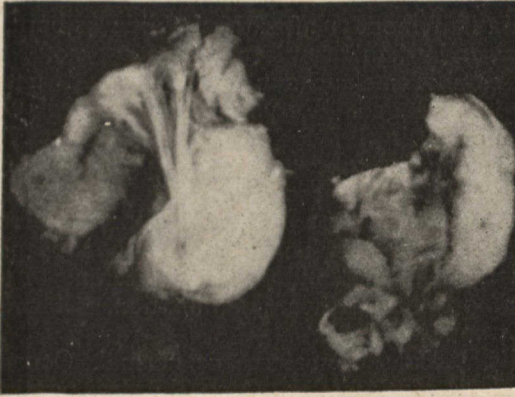
CASE 17.—Mrs. S., aged 59. Became insane one year ago after an attack of *la grippe*. In asylum one year. Delusions and violence.

*Examination.*—Ruptured perineum. Operation not advised on account of age and lack of facilities.

CASE 18.—Mrs. J., aged 32; excellent family history. As a girl, suffered from dysmenorrhea. Married, November 24th, 1891. Five months after marriage the patient became despondent at times with delusions. Ran away from home in Cape Breton, and was found wandering the streets of Boston with a violin in her hand. She was taken to asylum in Halifax, and in 1894 was transferred to New Westminster, where she remained, with the exception of a few months, till November, 1898.

*Insanity.*—Delusions: melancholia and childishness. Had intense hatred for her mother. Examination November 23rd. Ligaments thickened, ovaries hard. Operation November 23rd. Curetting, uterine fungosities removed. Appendages removed. Right tube had two fimbriated openings. Both ovaries were cirrhotic and cystic, with slight adhesions.

*Results.*—Physical: Convalescence complicated by stitch abscess. Removed from hospital to her mother's home December 10th. Her general nutrition has greatly improved, anemia has disappeared. Mental: Within a few days after the operation, a decided change in her disposition was apparent. She recognized her mother and manifested great affection towards her. Memory much better, and the whole mental condition improving. All



CASE XVI.—Salpingo-ovarian adhesions, with one cystic ovary. Photographs in water.

bands and restraints have been removed, and the patient is as easy to manage as an ordinary surgical case. Removed from hospital December 11th. Very much improved. Is making remarkable improvement since going to her mother's home.

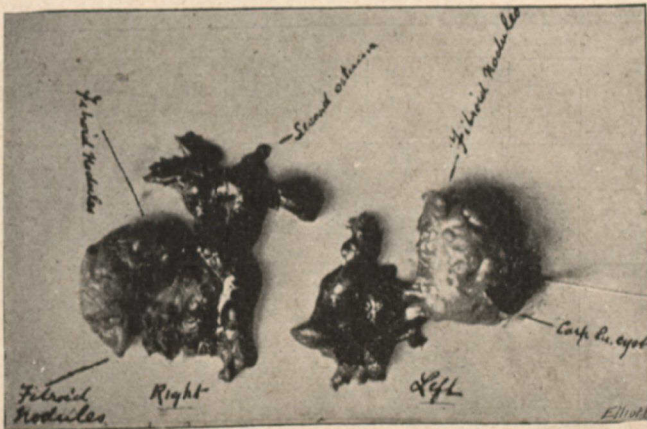
CASE 19.—Mrs. H., aged 38. Insanity followed birth of child. Examined December 1st. Deep ruptured cervix, enlarged ovary and retroversion. Operation December 1st. Amputated cervix, curetting, removed right appendage; left ovary tapped and tube removed. Right ovary was cystic with slight adhesions. Convalescence normal. Mental condition unchanged.

CASE 20.—Mrs. R., aged 38; four children; no miscarriages; suffered from pain in the back and side previous to giving signs of mental trouble. Insanity followed the birth of last child, four years ago. Examined in asylum December 3rd. Perineum rup-

tured; retroversion, with adhesions of right ligament. Operation advised. Still in asylum.

CASE 21.—Mrs. C., jun., aged 33; one child twelve years old; never been pregnant. Insane seven years. Husband not a little dissipated. I was unable to obtain complete history. All circumstances point to a strong suspicion of sepsis, possibly of a specific nature. Examined in asylum December 3rd, under chloroform. Retroversion with adhesions, fixed appendages, small amount like cervix. Ovaries slightly enlarged. Operation advised and under consideration by her friends.

CASE 22.—Mrs. C., aged —; three children, youngest two years. Insanity of three years' duration. Examined at St. Luke's



CASE XVIII.—Ovaries cystic and cirrhotic double ostia, ruptured corpus luteum cyst.

House, Vancouver. Lacerated perineum. Right ovary cystic with adhesions; left ovary adherent. Operation advised, and is being considered by the friends.

CASE 23.—Mrs. H., examined December 6th, 1898, under chloroform. Right tube thickened, left ligament thickened; ovaries in mass of adhesions below uterus. Operation advised.

*History.*—Married young; several miscarriages; no living children. Suffered several attacks of pelvic pain, requiring hot applications, etc. Five years ago had pain, called by her physician "appendicitis." Has suffered from premenstrual pelvic pain for years.

*Mental Condition.*—Has been subject to occasional attacks of melancholia; also with times of intense nervousness. Has taken a dislike for members of husband's family. Operation advised.

TABLE OF CASES SUBMITTED TO SURGICAL TREATMENT.

CASE	AGE	CHILDREN	MISARRIAGES	HISTORY OF PELVIC DISEASE	KNOWLEDGE OF PELVIC DISEASE BY PATIENT OR FRIENDS	VARIETY OF PELVIC DISEASE	VARIETY OF INSANITY	DURATION OF		TREATMENT	RESULTS	
								INSANITY	ASYLUM LIFE		PHYSICAL	MENTAL
1	35	Two	None	None	None	Cystic, prolapsed and adherent ovaries	Violent, maniacal	Three years	Two years, eight months	Curetage, abdominal section; double salpingo-oophorectomy	Improved, has gained 35 lbs in weight	Cured
2	59	Four	None	Pelvic pain for six months	None	Ruptured perineum; varicocele of broad ligaments	Melancholia with delusions	One year	One year	Curetage, abdominal salpingo-oophorectomy	Improved	Improved
3	47	None	None	Ovaritis fifteen years before	None	Retroversion, with general pelvic adhesions; adhesions of clitoris; retention of smegma	Religious delusion and melancholia	Three years and two months	Three years	Curetage, adhesions freed; removal of left appendage	Improving	Cured
6	28	Three	Several	Three years pelvic distress	None	Lacerated perineum; cystic ovaries	Religious and Melancholia	Three months	None	Curetage, double salpingo-oophorectomy	Convalescence from operation: died seven weeks after from meningitis	
8	25	Two	One	"Blood poison" following miscarriage	Yes	Retroversion; congested and lacerated cervix; cystic ovary	Mania	Two months	None	Amputation of cervix; removal of cystic ovary; ventro-fixation	Improved	No return of mania
10	38	Two	None	"Inflammation" after birth of last child	None	Endometritis; one ovary enlarged, one cirrhotic; salpingitic adhesions	Excitable before and during menstruation	Four years	Four years (with intervals at home)	Curetage, resection and removal of ovary; ventro-fixation	Improving	Improving
11	50	One	None	Vaginal discharge and pelvic pain	Yes	Varicocele; adhesions of tubes; cirrhotic ovaries	Menstrual	Fifteen months	Fourteen months	Curetage, removal of appendages	Improving	Improving
13	42	Several	None	None	None	Ruptured perineum; retroversion with adhesions; lacerated cervix and ovarian adhesions	Melancholia and mania; religious delusions	Two weeks	None	Curetage, amputation of cervix; vaginal ovariectomy	Died twelve days after the operation	
14	27	One	None	Was weak for three months following confinement, never well since	None	Cystic ovary; salpingitis; retroversion with adhesions	Delusions	Three weeks	None	Right appendage removed; left tube curetage	Improving	Cured
16	25	Three	None	None	None	Sac cervix; cystic, cirrhotic and adherent ovaries	Melancholia with delusions	Two years	Eighteen months	Amputation of cervix; removal of appendages	Convalescing	Improving
18	32	None	None	Dysmenorrhoea	None	Cirrhotic ovaries; uterine fungosities	Delusions, Melancholia	Six years	Five years	Curetage, removal of appendages	Convalescing	Very much improved
19	38	Two	None	None	None	Retroversion; laceration of cervix; cystitis ovary with adhesions	Delusions	One year	One year	Curetage, amputation of cervix; right ovary removed	Convalescing	Unchanged

Out of the twenty-three examinations here reported, pathological conditions were found in 21 or 91 per cent. lesions sufficient to call for treatment if the proper facilities had been at hand. As such was not the fact in two cases, I did not urge operative measures.

In eight cases was there a history of pelvic inflammation.

In five cases following confinement or miscarriage, probably streptococcus infection, another plea for aseptic and, if necessary, antiseptic midwifery.

In eighteen cases we note ignorance of the patient, the friends, or the asylum authorities of the presence of local disease.

This speaks for itself *re* an opinion lately published with reference to the percentage of pelvic diseases in asylum patients. So far as I could determine, not one of these patients had been examined by the asylum authorities, and with one exception no pelvic examination had been made by those physicians who signed the commitment papers.

As to the results it is still too early to speak. Dr. Russell, of Hamilton, might say that some of the statistics are not yet cold, but there has been sufficient evidence produced to show (1) The frequency of the association of pelvic trouble and mental aberration; (2) That in a certain proportion of the cases a return to mental health followed so directly (in two, so-called "hopeless cases," this change was complete within three weeks after the operation), that we are justified in concluding that the surgical measures were in some way responsible for the result. If the therapeutic value lay only in the surgical shock, it would be a prescription worthy of trial; (3) That many other cases are so improved that they can be managed at their homes and do not require to resume their asylum life. So far I have to report—Cases operated upon, 12; cured, 3; improved, 1; improving, 5; unimproved, 1; died, 2.

In two of the cases here reported is a history of gonorrhoea on the part of the husband, given me by the family physician, which for special reasons is omitted from the personal report, and in several others there exists a great probability of such infection. If this be the case, and if human nature is the same here as in Germany, where an authority has stated that eighty per cent. of the men have had gonorrhoea at some period of their lives, and if Lawson Tait is right when he says, "no man who once having had gonorrhoea can ever be certain that he is cured," then we may justly conclude that we have a new classification, *gonorrhoea insanity*, another link added to the chain of bondage forged by violation of Moses' injunction *re* adultery, and another point upon which the municipal moralist may ponder.

The type of lesion corresponding to that produced by gonorr-

heal infection is found in the class of cases which give the highest percentage of recoveries—a classification first made by Hobbs, of London, that of inflammatory and adherent condition of the appendages. In fact, this association is so close, that we are justified in giving a more satisfactory prognosis in cases whose mental trouble followed gonorrhoeal infection.

The post-operative treatment differs little from that in ordinary abdominal cases, nearly all required to be strapped to the bed, hands, shoulders, and feet, and a broad bandage placed over the body and around the bed. Much trouble is experienced with the movement of the bowels. The selection of the nurse in charge is a matter of no little importance. She should be strong in mind and body, and possess tact sufficient to cope with, conquer, and dispel the slightest indication of any return to the former abnormal habits of thought or expression. One additional nurse is required to take alternate duty. Although it is occasionally necessary to accept a friend of the patient as second nurse, it should if possible be avoided and none but strangers be employed.

These patients as a rule are anemic. As soon as the digestive system is in proper condition, they are placed upon some easily-assimilated ferruginous preparation. Regular evacuations, and blood rich in hemoglobin are the best eliminators of ptomaines with which the tissues have been saturated during years of impaired function and systemic depression.

There are several additional points to which we may call attention: (1) That insane patients bear anesthesia and operative shock as well as ordinary cases (the deaths that can be justly attributed to the operation being but one in twelve). (2) That it is impossible in a certain proportion of cases, to determine the pathological condition without an intra-abdominal exploration, and considering the mortality of simple section in a normal surgical environment, such exploration is justifiable where the condition is obscure. (3) The urgent necessity of a more thorough knowledge of the diagnosis and treatment of female disease, our college courses are insufficient to give even a working knowledge of this department. (4) The urgent necessity of greater attention being paid to the so-called minor pathological conditions, lacerations, ovarian prolapse, salpingitic adhesions, etc., as these conditions are more frequently the cause of great nervous disturbance than the more gross and easily diagnosed cysts and fibroids. (5) The necessity of a most careful examination and if necessary treatment of all cases exhibiting symptoms of insanity before committing them to the asylum. Until the political machine ceases to make the position of asylum superintendent a reward for party loyalty, we may still write over some asylum gates: "All hope abandon ye who enter here"—a condition which happily does not exist in New Westminster.



It has been urged that disease of the genital organs in women cannot be a prolific cause of insanity, and the reason offered for the statement is because the ratio between the male and female insane is about equal. Have the causes of insanity among the males been determined, and has it ever shown that disease of these parts is not a factor in its production? Are not these organs undistinguishable in their early embryological developments? Are not the nerve and blood supply analogous? Are not the ravages of disease in these parts recognized by well-known lesions, and may there not yet be much to be learned in this particular field? Again, who are the men who largely recruit the asylum ranks? Are they the young men who, in the period of functional activity, have excelled in abuse of their sexual system? We shut our eyes to this too often. The excessive waste of highly vitalized fluids, with its accompanying exhaustion, the inflammatory conditions, acute and chronic, which are the product of the gonococcus, to say nothing of the grosser pathological results—abscesses, strictures, etc. Must nature bear this outrage without revenge? Our asylum reports state self-abuse as a cause of insanity in a certain proportion of cases. When an elongated and constricted prepuce, adhesions and retention secretions are a recognized cause of nervous disturbance in male children, it is but reasonable to suppose that undue irritation and exhaustion may cause the most grave nervous disturbance in adults, but when we have added to this condition one of specific infection, with all its train of results, it is within the limits of the probable that one cause of insanity in the male may be analogous to those in the female, and if the cause, then it follows that the treatment should be as direct and radical.

Dr. Lang, of Owen Sound, gave me two instances in his practice of the relief of insanity after circumcision. The subjects were boys of sixteen and eighteen and had both been in the asylum. Circumstances were such as led him justly to conclude that the operation effected a cure.

Dr. O'Brien, of Nanaimo, told me of a case occurring in his practice also bearing somewhat directly upon this point. A boy of fourteen, stout and well developed, suffered from attacks of epilepsy, occurring about once a month, with incontinence of urine. The fits became more frequent, occurring every day. Bromides had no effect. Examination showed left testicle undescended and bulging above the inguinal ring. A simple incision, with stretching of the pillars, allowed the testicle to descend into the scrotum, resulting in complete cure of the fits. My own case-book gives one instance of pain in roof of the mouth, trembling of one arm and leg, with mental irritability very much improved after the removal of a diseased testicle.

We regret that our distance from medical centres forbids access to the complete medical index, as it is probable no small amount of data could be gathered upon this subject. However, sufficient evidence is at hand to substantiate the probability of a closer similarity in these matters than many of us have hitherto supposed.

Lest any careless reader or superficial observer, whose thoughts follow but beaten tracks, and whose memory hovers over "mutilating operations upon the insane," "wholesale mutilation of helpless lunatics," and other absurd phrases, might conclude that it is within the meaning of this paper that the cause of insanity among women is found alone in diseased pelvic organs, or that surgical measures are advocated as a panacea for mental abnormality, we wish to emphasize that no such erroneous conception exists either upon the part of the writer or in the minds of those who have appeared before the public as workers in this department. But one thing we do believe, and shall advocate so long as there are additional worlds of conservatism to conquer: That the principles of surgery and humanity unite in demanding that the insane receive at least the measures of consideration and treatment that their diseases call for; that those helpless sufferers from pelvic disease who are confined in our asylums, have extended to them the benefits of modern treatment; that asylum life be no barrier to the application of modern therapeutics; and that our insane mothers, sisters and wives, receive treatment equally skilful to that given in daily practice by hundreds of our educated physicians. If this be done, a large per cent. of the asylum population may be sent to their homes, households united, family ties restored, and given "beauty for ashes, the oil or joy for mourning, and the garment of praise for the spirit of heaviness." This is no idle dream, no strain of imagination, but a fact in our city. What has been done here can be repeated in any city in Canada. It is an opportune moment, in view of the evidence submitted, for the profession to unite in this new crusade against officially retrenched and fortified conservatism and extend to incarcerated invalids the measure of mercy that an enlightened sentiment desires, and the spirit of justice demands.

*Re* the question of the relation of physiological processes and psychical phenomena, we cannot venture a positive statement. That a relation exists is patent to every observer of mental phenomena; that the relation in a definite formula is hazarding more than our present information will warrant.

It has been stated that the Ego is "the sum of the combined function-activity of every organ in the body at its best estate, and therefore any departure therefrom, or loss of function in any organ either by disease or surgical extirpation must impair the Ego in direct ratio to the status of that organ, in the human economy," i.e., if I have ten functions they together constitute the Ego; remove

one and the result is an impaired Ego. If we knew that there existed an invariable law of cause and effect in the relation of physical functions and physical phenomena one might admit this, but we do not know that, nor do the facts bear it out. A few years ago I reported a case in which the spinal cord was completely severed at the level of the seventh cervical vertebra, yet for several hours the consciousness remained unaltered, the Ego unimpaired. The result of brain surgery also bears out the fallacy of this somewhat universally accepted formula of the Ego, as above expressed. The definition of the Ego given by perhaps the most forward scientific psychologist of the day, Wilhelm Wundt, of Leipsic University, is "the perception of the inter-connection of internal experience which accompanies that experience itself," that is, the Self is the consciousness that persists throughout its perceptions and experiences. These experiences may come through the sense perception of the outer world, external to the body, or from the body itself, which psychically speaking is external to the mind, and in addition to these external experiences are the internal subjective experiences of the purely abstract mental processes such as generalization, judgment, etc., and for these purely abstract mental processes we cannot designate any specific part of the nervous system as the physical parallel. Is it ever possible to denote the definite location of the immaterial? Cannot the experience of the Ego be had wherever the nerve fibre penetrates? Wherever from external causes, outside the body, or from local physical causes the nerve fibre is affected, there sensation occurs, and there the Self is for the time being conscious of experience. But if the local sensation be exceedingly painful and long continued, as in a severe toothache, the harmony of the Self may be disturbed until the tooth is removed. The loss of the organ and the impairment of the function of mastication is incomparable to the benefit to the organism given and the harmony of the Self obtained by the relief of pain. With the knowledge of slight psychical disturbance caused by brief irritations of a sensory nerve, we can easily conceive that a continuous irritation of a sympathetic nerve devoid of sensitive fibres could not but act prejudicially upon the local functions and produce correspondingly disastrous results upon the Ego without even a manifestation of painful sensation. More especially would we expect a disturbance of physical harmony if the irritations extend to those nerves which control such important functions as the elaboration of the most vital fluids of the body, and that of procreation—the development and perpetuation of life itself. However, theorize as we may, the fact remains that the removal of pelvic disease in the insane gives, in a large per cent. of the cases, a speedy return to mental health. It may be the sudden surgical shock. Possibly Dr. Vallee, of Quebec, might suggest that "the

influence of traumatism" plays not a small part; but if, as the reasonable deduction from our work indicates, the relation between pelvic disease and insanity is often one of cause and effect, it is high time that this matter be made a question of national inquiry, for, other than the destruction of the bacillus tuberculous, no question before the profession is of greater moment.

A word may be said to those who oppose the practices here advocated. Ridicule will not act as a substitute for experiment and reasonable deductions therefrom; honest investigation is not likely to be undertaken by those who find their highest ambition reached in attempting to depreciate the work of others. This problem is to be solved by methods foreign to the untrained in modern gynecology and statistics gathered from without the operating room are of little value in aiding this solution. Once upon a time there were no pus-tubes outside the corporation of Birmingham, and the profession of England's capital ridiculed an eccentric and original Tait, but there came a time when London surgeons opened their eyes and then opened the abdomens of those crippled from pelvic disease and Birmingham no longer had the monopoly of pyosalpinx. It may be that the cases of insanity amenable to surgical treatment congregate in London, Chatham, Montreal and Victoria. This is absurd, but it is the logical conclusion of many of those opposed to these methods, "who having eyes see not." Some martyr says: "Lord open the King of England's eyes." Well may we ask that the eyes of those in official positions be opened that they may see that many of those under their charge who have "eaten of the insane root that takes the reason prisoner," be purged of their disease and relieved of their load of bondage.

It would be ungrateful on my part to conclude this paper without expressing my appreciation of the hearty co-operation and the invaluable assistance which I have received from the Medical Superintendent of our Provincial Asylum, Dr. Bodington, and the matron, Miss Filmore, both of whom are awake to the importance of any measure that may tend towards the amelioration of the distress of those committed to their charge; and also I must thank those who so freely contributed of their time and skill in assisting in the practical part. I refer especially to Drs. Frank Hall, Hart, Fraser, Holden and Lewis Hall, to whom I am largely indebted for the results of one year's work among the insane in private practice, which is but a feeble following of Drs. Rohé and Hobbs.

## TWO MONTHS' WORK IN GENERAL GYNECOLOGY AND ABDOMINAL SURGERY.

BY A. LAPHORN SMITH, B.A., M.D., M.R.C.S. (Eng.), MONTREAL,  
Fellow of the American and British Gynecological Societies; Professor of Clinical Gynecology in  
Bishop's University, Montreal; Gynecologist to the Montreal Dispensary; Surgeon-in-Chief  
Samaritan Hospital for Women; Surgeon to the Western Hospital.

CASE 18.—On the same day, the 21st of September, at the Western Hospital, I performed coeliotomy on Mrs. B., aged 28 years, who had been complaining for several years of dysmenorrhea, menorrhagia and reflex nervous symptoms, due to laceration of the cervix, and piles due to a retroverted and fixed uterus resting on the rectum. I first dilated and then curetted the uterus and applied equal parts of tincture of iodine and carbolic acid to the interior, and then the cervix, which was everted, swollen and eroded, was amputated by Schroeder's method. The sphincter ani was then forcibly dilated with the two thumbs. After careful preparation of the patient, as well as of my own hands, the abdomen was opened and the right ovary and tube were dug out of a mass of adhesions and removed, as they were in a hopeless condition. The uterus was freed from its adhesions, and the left ovary and tube were brought up through the incision. As she was so young I was anxious that menstruation should continue, so after removing the left tube, half of the left ovary was cut out in such a manner as to leave two long flaps the whole length of the ovary, which were easily brought together with fine silk sutures. What remained of the ovary was a little larger than a lead pencil and about two inches long. The uterus was then fastened to the abdominal wall with two silk worm-gut sutures. This patient made a splendid recovery, menstruation being normal in time and quantity, and she is completely cured of her pain in the side and back, as well as of the constipation.

CASE 19.—Next day, at my private hospital, on the 22nd September, I performed vaginal coeliotomy on Mrs. F., aged 20, brought to me by Dr. Germain, on account of the severe hemorrhage every month. She began to menstruate at fourteen, and always profusely, although without pain. She was married at seventeen and had two children, the last fifteen months ago. Her first confinement was difficult and she had laceration of the cervix. The uterus was in retroversion, and the left tube and ovary were very bad, the right tube not quite so much affected. After performing Schroeder's amputation of the cervix and curetting, with the application of carbolic and iodine to the endome-

trium; I opened the abdomen through the anterior vaginal wall between the bladder and uterus, and removed a pus tube and ovary from the left side. As the right tube also contained pus, I removed it also, but allowed the right ovary to remain, although it was covered with adhesions, which I carefully removed, and washed the ovary clean. While freeing the ovary and tube I also freed the uterus and brought it forward and fixed it to the vagina by a silk worm-gut stitch passing through the vaginal incision on one side, then through the uterus and out again through the vagina on the other side. This was not tied, however, until the wound had been sewed up. She had a temperature of 102 degrees for a couple of days, perhaps due to the escape of a little pus into the pelvis during the removal, but she made a rapid recovery, having almost no pain, and she wished to get up on the third day.

CASE 21.—Next day, on the 23rd of September, at the Samaritan Hospital, I removed cancer of the breast, including the fascia, covering the pectoral muscles as well as the glands of the axilla, from Mrs. P., 41 years of age, who had a partial removal some months before by another surgeon. She made a good primary recovery. I hardly venture to think that there will be no recurrence.

CASE 22.—Next day, on the 24th of September, at the Western Hospital, I performed abdominal section on Mrs. B., 48 years of age. When I opened the abdomen I found the omentum, the intestine, the ovary and tubes all adherent in one solid mass, and on the first attempt to separate them a profuse hemorrhage took place. This was stopped by clamps and ligatures, and I proceeded to enucleate the tubes and ovaries. I found them to be in a condition of papillomatous cancer. It was now too late to retreat, and in order to stop the hemorrhage I was compelled to tie both uterine arteries and to remove the uterus. She died, unfortunately, within an hour of the completion of the operation. It would have been wiser to have stopped at once and closed the abdomen.

CASE 23.—On the 28th of September, at the Western Hospital, I operated on Mrs. D., for vesico vaginal fistula. This patient had had, a very severe instrumental delivery, the child's head tearing completely through the cervix and then through the bladder wall adjacent. This occurred several years ago, and ever since she has had, in addition to the reflex nervous disturbances of the lacerated cervix, all the misery of having her clothing saturated night and day with urine. I followed a rather unusual method in this case. I began by passing as large a bougie as would fit tightly in the fistula, and with a sharp-pointed scissors I cut out the bougie, leaving the cicatricial ring tightly attached to it like a piece of

rubber tubing. An incision was now made in the middle line through the vaginal mucous membrane, which was turned aside and the bladder pushed away from it by the finger, precisely as is done in vaginal laparotomy. There was no difficulty in doing this because the fistula was first cut out, and the only thing holding the vagina and bladder together was the cellular tissue. The hole in the bladder left by the fistula was now caught up with several pairs of Poean forceps, and the muscular tissue strongly brought together with a running cat-gut suture. The hole left by the fistula in the anterior vaginal wall was also closed separately with cat-gut, and then the anterior vaginal wall was sewed up in such a manner that the hole in the bladder did not lie opposite to the hole in the vagina. The bladder was then filled with milk, but nothing leaked through. She remained in the hospital for three weeks, and went out perfectly cured of her infirmity. I have reason to believe that there are many cases of this kind throughout the country on whom no attempt at cure has ever been made.

CASE 24.—On the same day, at a private house, in consultation with Dr. G. T. Ross, I curetted a Mrs. T., aged 31 years, for a profuse hemorrhage, which had been going on incessantly for over a month. She had had three children and no miscarriages; her last child four years ago. She was away for the summer, but appeared to become pregnant on her return about the middle of August. She was about a week past her time to menstruate when she began losing clots of clear blood, for which she had taken ergot with temporary benefit. I proposed to curette her as the quickest way to stop the bleeding, but she refused her consent. On examining her I found the uterus pushed over to the right side, and there appeared to be a fluctuating swelling on the left, but there was no hard mass, so that if she had a tubal pregnancy, the tube must have been empty at the time. I did not see her again for several weeks although I warned her of a possibility of internal hemorrhage and the possible cause of it. I was called again nearly a month later, with an urgent request to curette her, as she was continually fainting and becoming unconscious. This was done with the result that the hemorrhage was completely stopped, and did not appear again except at the normal period, and she is now apparently well.

CASE 25.—The next day, September 29th, at my private hospital, I performed total abdominal hysterectomy on Miss B., aged 41, who had a number of fibroid tumors in the uterus and broad ligaments. She was especially anxious to have them removed because her mother had died from a similar tumor turning to cancer. The two ovarian, the two round ligaments, and the two uterine arteries were tied before the tumor was removed, so that very little blood was lost. Everything went well until mid-

night, when the pulse began to go up. At 2 a.m. it was 140. As her temperature was going down, as her pulse went up, I thought there must be a hemorrhage, and hoping to find it and stop it, I reopened the abdomen the next day, but did not find any hemorrhage to speak of, and she died thirty-six hours after the operation, apparently from heart failure.

CASE 26.—The next day, September 30th, at the Samaritan Hospital, Mrs. H., 37 years of age, had dilatation and curetting of the uterus, Schroeder's amputation of the cervix, Hegar's operation on the perineum, and also Alexander's operation for retroversion—the five operations taking a little over an hour. She made a good recovery.

CASE 27.—On the next day, October 1st, Mrs. B., 27 years of age, was operated upon at the Western hospital for a broad ligament cyst on the left side, hydrosalpinx and ovarian cyst on both sides. The operation was difficult owing to the adhesions, but very little blood was lost; but the contents of the tubes or ovaries, or perhaps the cat-gut infected the peritoneum, and she gradually became septic and died in a little more than a week.

CASE 28.—On the 4th of October, at a private house, I was called by Dr. Aubry to Mrs. M., 16 years of age, who had been delivered of a very large child about a week before, with the result that the perineum was torn down to the sphincter. Her physician had carefully sewn the tear at the time, and she seemed to be doing well for the first few days, when her pulse and temperature both went up. There was a very putrid odor from the vaginal discharge, and when I saw her she appeared very pinched and in great danger. I thought it best to give her a thorough cleaning out with bichloride and to drain the uterus with gauze, but on proceeding to do this I found the wound of the perineum covered with diphtheritic membrane, so I reluctantly cut all the stitches and opened up the wound. I then drew down the cervix and scraped a lot of membrane off the os, and washed thoroughly with bichloride, and introduced a strip of iodoform gauze up to the fundus. The uterus was not curetted, because I have come to the conclusion that curetting in the presence of virulent poison very greatly increases the danger. The vagina was filled with boracic acid and two or three sublimated tampons. The raw surface of the perineum was also covered with boracic acid. As her pulse was 140 no anesthetic was used. I have not seen her since, but her physician tells me that her pulse and temperature fell rapidly and she made a good recovery, being able to travel to Nova Scotia a few weeks later. It should be noted that this case had nothing to do with the two deaths I had to deplore, and which were operated on four days before, neither did it imperil any of the cases which followed it. I am frequently called in



consultation to desperate cases of puerperal septicemia, and I take the greatest care to disinfect my hands after it with bichloride of mercury, permanganate of potash and oxalic acid, and so absolute is my faith in these antiseptics that I have not hesitated to perform abdominal section the next day, and in no case has any of these patients died.

CASE 29.—On the same day, October 4th, at the Samaritan Hospital, I performed curetting and repair of the cervix and suspension of the uterus through an abdominal incision on Mrs. H., 31 years of age. There was no apparent cause for infection in this case, as she was operated on at half-past ten in the morning, and I did not even see case 28 until an hour and a half later, so there was no connection between the two, but case 29 became rapidly septic and died in three or four days.

CASE 30.—At my private hospital on the 5th of October, I dilated and curetted a Miss F. for very severe dysmenorrhea, apparently due to stenosis and anteflexion. She suffered so much that she had to go to bed one or two days every month. After dilating and curetting, and applying carbolic acid and iodine, I always pack the uterus tightly with iodoform gauze. It is too soon to say how the case will turn out.

CASE 31.—Mrs. B., aged 33, came under my care the 5th of October. As a girl she enjoyed good health; was married at twenty-one, had three children, and up to two years ago, or three months after her second marriage never complained. Since then, however, she has never been well. Conception was thought to have occurred on three or four occasions, but she always aborted in third month, with hemorrhage and pains. She had had no menstruation for three months previous to present one coming on about a month ago and continuing slightly ever since, accompanied with severe pains. Four days ago she was taken with a severe flooding and such severe pains that she became unconscious, and does not know what came away. Her physician, who had been attending her for five weeks, and had already diagnosed disease of the ovaries and tubes, now came to the conclusion that there might be tubal pregnancy, and called me in consultation. I confirmed the diagnosis, that is, the presence of ruptured tubal pregnancy in a diseased tube, and advised her being brought in the ambulance to the Samaritan Hospital in order to remove it. Her pulse was 110 and she was vomiting constantly, so I decided to wait a little and try to get her in better condition, at the same time being fully prepared to operate at once should there be any sign of another hemorrhage into the peritoneum. A mass could be felt as big as a cocoa-nut in the right side, the uterus being pushed over to the left by it, and the ovary, I thought, was imprisoned in the mass, because the slightest pressure on the mass

caused severe vomiting for several hours. She was put on a stomach preparation and carefully fed until October 25th, when her temperature and pulse came down to normal. She took  $\frac{1}{30}$  grain of strychnine three times a day during three weeks, and her bowels were thoroughly emptied. As the lump was large enough to project up under the abdominal wall, I made a long incision, and on opening the abdomen found that the omentum had cleverly come to the rescue by walling off the ruptured tube and blood clot from the rest of the peritoneal cavity by wrapping itself around the ruptured tube and fetus and blood. The adhesions were quite firm, but were finally detached, revealing a mass of blood clots with a fetus, four inches long among them, slightly macerated. These were cleaned out, and then the densely adherent right tube and ovary, together with the vermiform appendix in one inseparable mass, were with difficulty shelled out. The ovarian artery was tied separately, and also the uterine at the cornu, and the tube and ovary removed. The vermiform appendix was cut off level with the cecum, and the hole in the bowel closed with fine silk sutures. The other end of the appendix was buried to the depth of an inch in the mass of inflammatory exudate in the ovary. Although there was no bleeding at the operation, the pulse went up to 140 and temperature 101 degrees the same night, but both were normal on the third day and have remained so since—now two weeks since operation. She has had no nausea or vomiting since the day after the operation, although before it she had been vomiting almost steadily for five weeks; neither has she had any pain at all since the operation. She has a good appetite and feels well in every way. The left ovary was allowed to remain, but the left tube was diseased and was removed. She will thus be saved the premature menopause, but will run no risk of another tubal pregnancy.

250 Bishop Street, Montreal.

*(To be continued.)*

### Special Selections

---

#### CERTAIN POINTS OF INTEREST IN PHTHISIS.

H. P. Loomis sums up many interesting points concerning phthisis in the *Medical Record* of May 21st, 1898. It is not of the well-known methods of treating phthisis that the writer speaks at first, but of the present status of a new line which will hold a prominent place in the next two years—namely, the serum treatment.

Every one is familiar with the fact that, long before the discovery of diphtheria antitoxin, investigators in various countries had been experimenting with the products of the growth of the tubercle bacillus, Koch's tuberculin being one outcome of this line of work. It was in the media changed by the growth, and loaded with the product thrown off by the bacillus in its metabolism, that the antitoxin for the arrest of phthisis was sought.

The discovery of a serum which had antitoxic properties in diphtheria stimulated a new line of research in reference to phthisis, and many well known investigators throughout the world are at this moment endeavouring to obtain a serum which, when injected into man, will antagonize the growth, protect against the action of the bacilli, and finally destroy them in the body. The majority of scientists are now working, not with the media on which bacilli grow, but with the body of the bacillus itself—the protoplasm which is contained within the cell.

It is believed that this cell body of the bacillus either contains or elaborates, by its cell activity, three substances: a fever-producing principle, a general toxin which circulates in the blood of the phthisical patient, and a poison which acts locally and causes the well-known lesion of the tuberculous inflammation—coagulation necrosis. Up to the present time the first and last properties only have been isolated; the second is still an unknown quantity, and this fact no doubt accounts for the only partial immunity which can be conferred on an animal by any of the antitoxins as now made. The investigators all seem to be working on nearly parallel lines, seeking for a substance prepared with a view to attacking the bacillus, not in itself, in germicidal fashion, but by destroying the pabulum upon which it thrives, literally starving out the enemy.

At present there are two kinds of products which have satisfied the laboratory workers as exercising a more or less complete controlling influence over the development of tuberculosis artificially induced in animals, viz., remedies which are the product of the germ itself, and serum from animals rendered immune by

culture products of the bacillus. To the first belongs Koch's new tuberculin. In the *Deutsche Medicinische Wochenschrift* of April 1, 1897, Dr. Koch described a new tuberculin—T. R. he called it. He claimed far more for this than he ever did for his original tuberculin, and stated positively that with it he could render animals immune and could frequently cure them after they had contracted the disease. Dried tubercle bacilli were taken, finely powdered, and centrifugalized with distilled water. The opalescent solution when tested upon animals gave the tuberculin reaction. The residual germs were submitted to this treatment a number of times, until finally all were practically dissolved or broken up, the cell wall being destroyed. The latter solution in small quantities seemed to exert both an immunizing and curative action in experimental tuberculosis. This preparation is now being clinically tested all over the world. The writer has not had personal experience with its use. An agent of the importers brought him some bottles last June, but they had become contaminated owing to improper putting up, so he was afraid to make any clinical use of them. Clinical facts, as far as he has been able to learn from published articles, have not borne out Koch's claim for his new tuberculin.

A new antitoxin was introduced last autumn by Hirschfelder, of California. His scientific reputation was such that the product, oxytuberculin, has been extensively tried. It is made by adding peroxide of hydrogen to tuberculin, subjecting them to a steam bath for forty-eight hours, and then adding caustic soda. He then filters and neutralizes the filtrate with boric acid. The discoverer claims that as the result of this treatment the toxin of the tuberculin is converted into an antitoxin.

As far as the writer's personal experimentation with this antitoxin is concerned, on animals it does nothing. Hirschfelder claims that it delays the development of tuberculosis in guinea-pigs. This Loomis has not found to be the case. He has had an opportunity to judge of its action on the human subject in only one selected case. He saw no benefit from its use, but of course this is not a fair test. He has found that it is apt to cause some local irritation. At the present time there are three anti-tuberculous serums being extensively used, but he understands that Babes and Behring are both actively engaged in working out new products.

If the antitoxic serum treatment of tuberculosis could be freed, for the present at least, from its commercial aspect, and systematic experiments be continuously conducted in hospitals and sanitariums, then this method might be looked to for good results.

The serum most extensively used at present is Maragliano's serum, or, as it is commonly called, the "Italian serum," obtained

by treating horses with tuberculin and then with virulent culture of the tubercle bacilli. Maragliano says that tuberculous temperature is reduced in all cases with this serum, and modestly claims apparent improvement in the disease in very many cases. The author has had no experience with this serum, but Dr. Walter James gave it with great care, and for a long period of time, to a patient whom Loomis saw with him in consultation. He states that he "saw absolutely no benefit and no harm from its use"; the patient steadily lost ground from the beginning, and finally died.

A second serum is Paquin's, known as tuberculosis antitoxin. This is prepared by Paul Paquin, and is used extensively throughout the West. Its preparation and introduction are entirely along commercial lines. It certainly is not an inert substance, as the writer has seen a patient go into a serious collapse within a few minutes after an injection.

A third serum is the antistrepto-coccus serum. This serum is not an antituberculous serum, but is often given in cases of phthisis with mixed infection. It is claimed for it that by destroying the streptococcus, which is so often present, many of the annoying symptoms of phthisis are removed, such as purulent expectoration, night sweats, anorexia, and high temperature, and thus it indirectly affects the tuberculous process favorably. The writer tested it last spring carefully in the New York Hospital, and had daily examination made of the sputum of the patients who were being injected. In none did the microscope show any change in the mixed infection, nor did the patients show uniform improvement.

For a long time the United States Government has been experimenting in the biochemical laboratory of the Department of Agriculture with an antitoxin serum, looking primarily toward finding an immunizing agent, especially for use among domestic animals. A large experimental farm just out of Washington is connected with the laboratory and the work is very complete. Dr. de Schweinitz, the director of the laboratory, last summer wished to have this serum tested clinically at the Loomis Sanatorium, and the writer agreed to give it a thorough trial. The serum being provided by the Government, from purely scientific motives he was the more ready to test its efficiency. In the manufacture of this antitubercle serum, attenuated cultures, culture fluid, and tubercle bacilli were injected into horses continuously for fifteen months (4459 cubic centimeters of the fluid being injected in some horses). Animals were experimented upon with the serum from these horses. The following conclusion is taken from the Government report: "The experimental results obtained lead undoubtedly to the conclusion that, while the treat-

ment with antitoxin serum is still in the experimental stage, and should as yet be used only under the best conditions, we are on the road to success in the treatment of this disease and nearer our goal than ever before." Some of this serum has been sent to Liberty continuously for the last seven months, and thirty-eight patients have been injected every day, or every other day, for varying lengths of time with ten minims of the serum. A report of the first fifteen cases treated is here given: The average number of injections given each patient was thirty-eight. No other treatment was employed. All had the benefit of climate and good food. Four were discharged cured, six improved, and five became worse under the treatment. Eleven gained in weight, two remained stationary, and two lost weight.

The writer has always considered that any particular line of treatment carried on with patients who are also under the best climatic conditions may not be a very fair test of its efficacy. So far he has been using this serum lately on a number of patients in his wards in Bellevue Hospital, but the treatment has not been continued long enough to reach any conclusions. If it improves that class of cases, he for one will believe in its possibilities.

Were the writer to formulate such conclusions as he has been able to gain of serum therapy in the treatment of tuberculosis as it stands to-day, they would be as follows: None of the serums have marked or immediate effect on the disease. The question is, Should they be expected to? If one tries all the serums in a disinterested way, it must be recognized at once that they are certainly not inert substances.

One cannot but be impressed with the moral effect which hypodermic injections have on some patients. The writer has seen, in neuratic patients, fever leave and weight increase under daily hypodermics of water.

Dr. Stubbert, the physician in charge of the Liberty Sanatorium, reports that comparative tables of the results of the treatment of phthisis show a balance in favor of serum, in increase in weight, decrease of expectoration, general improvement, and physical signs.—*Thera. Gazette.*

---

### THE TRIENNIAL INTERNATIONAL CONGRESS OF PHYSIOLOGISTS AT CAMBRIDGE IN 1898.

---

BY HORATIO C. WOOD, JR., M.D., PHILADELPHIA.

---

The Fourth International Congress of Physiologists which met in Cambridge, August 23, and continued its sessions for the following three days, was in every way a great success. There was a very large number of papers presented—in fact more than

there was time for the Congress to hear—and most of them were of a very high grade, while some were of extraordinary interest, not only for the physiologist but also for the clinician; indeed, several of the latter found it worth their while to attend the Congress as regularly inscribed members. Among these might be mentioned the famous surgeon Professor Kocher, Professor Sahli of Berne, who is rapidly taking a place among the foremost diagnosticians of Europe, Professor Lauder Brunton, of London, and many others of nearly repute. Most of the time at the disposal of the meeting was employed in seeing demonstrations and hearing papers. The Congress, however, found time to attend the ceremony of conferring the honorary degree of Doctor of Sciences on several of its members by the University of Cambridge. One of those to receive this great honor was Professor Bowditch, of Harvard University.

The Congress was opened on the 23rd of August at ten o'clock by its President, Professor Foster. After alluding to the difficulties under which English physiologists labored on account of the laws regulating vivisection, and requesting the foreign members to have respect for those laws, Professor Foster declared the Congress opened and called on Professor Marey to read his paper. Professor Marey, after showing the necessity of a unification of measurements and methods employed by physiologists, moved the appointment of an international committee for the regulation of the same. Dr. Demoor, of Brussels, followed with a very interesting and important paper on "The Histological Changes Produced in the Cerebral Neurons by Excitation." Dr. Demoor showed lantern slides of histological preparations (by the method of Golgi) illustrating the ganglionic cells of the cerebral cortex. In an animal killed suddenly (by decapitation) while in a normal state the cortical neuron is characterized by the presence of numerous processes, which are furnished with appendices projecting at right angles. After morphine poisoning these appendices, and to a large extent also the processes themselves, disappear. This moniliform state, however, is not peculiar to morphine narcosis, but occurs equally as a result of anesthetization by ether or chloroform. A similar condition of affairs is found after psychical excitation: thus a guinea pig which was chased around the laboratory until thoroughly frightened presented the moniliform appearance of the neuron well marked. The author regards this simplification of the neuron processes as a sort of contraction of the nervous protoplasm of the cerebral cells due to an excitation of the same.

Dr. Asher, of Berner, read a paper of considerable clinical interest on "The Theory of Lymph Formation." He said the lymph could no longer be regarded as the merely mechanically

exuded blood plasma, nor did Heidenhain's theory, which looks on it as a secretion of the walls of capillary blood-vessels, seem to him tenable. He himself believes the lymph to be the carrier of poisonous products of the body metabolism, which are transformed by the lymph glands into substances without toxic properties. In support of this theory he has shown, firstly, that the lymph has a distinctly poisonous action if injected into the circulation; secondly, that those substances which increase tissue work, bringing about a larger destruction of bodily proteids—as, for example, drugs increasing the flow of bile—also cause an increase in the rate of flow of lymph from the liver. Salt solution he claims acts as a lymphagogue not by virtue of any physical property, but because it increases the work of the liver. In the third place Dr. Asher has found that the lymphatic glands undergo a demonstrable histological change, the result of their activity. If one stimulates, through the chorda tympani nerve, the salivary gland of one side, the increased flow of saliva—in other words, the increased metabolism—is accompanied by an increase in the rate of flow in the corresponding lymph channels. As a result of this he has been able to find changes in the submaxillary lymph-glands of the same side, visible both to the naked eye and to the microscope.

In connection with Dr. Asher's paper might be mentioned that of Dr. Biedl, of Vienna, which, although read at another time, had a bearing on the subject. The paper was entitled "A new Form of Experimental Diabetes." Dr. Biedl has found that ligating or cutting the thoracic lymph-duct in dogs causes the appearance of sugar in the urine. He regards this fact of importance, because the glycosuria was not a merely transient one and was therefore a true clinical diabetes. He admitted, however, that in the course of a month or two the sugar disappeared from the urine owing to the formation, as he found by post-mortem examination, of collateral lymph-ducts. The intravenous injection of lymph will set aside the symptoms temporarily. Contrary to the statements of Gaglio, he has found that ligation of the thoracic duct in cases of pancreatic diabetes only increases the percentage of sugar in the urine.

"The Demonstration of the Union of Nerve-fibers with the Cells of the Sympathetic Cervical Ganglion," by Dr. Langley, of Cambridge, proved to be one of the sensations of the Congress. Two months previously the sympathetic nerve of a cat had been divided just above the cervical ganglion, and a large piece removed to prevent reunion. The pneumogastric was divided in the same way and its central end joined to the peripheral end of the sympathetic. Dr. Langley reasoned if these nerves had grown together, then stimulation of the vagus ought to give the same symptoms



that stimulation of the sympathetic would under ordinary conditions. This he found to be the case; if the electrodes were applied to the vagus above its seat of junction electrical stimulation caused separation of the eyelids, dilatation of the pupil, contraction of the vessels of the ear, and the other well-known symptoms of sympathetic stimulation. From this experiment Dr. Langley concluded that all the spinal nerves are essentially the same, and, for example, a vaso-dilator can be converted into a vaso-constrictor, and *vice versa*.

Drs. Mott and Halliburton presented a paper on "The Influence of Choline and Allied Substances on the Blood-Pressure." The chief interest of their paper lay in the fact that the authors have shown that the cerebral fluid in cases of brain atrophy contains choline, which substance they believe to be the cause of the circulatory disturbance which so often occurs in the course of cerebral degeneration. They have found that the cerebro-spinal fluid from normal individuals when injected into the circulation in moderate doses has no effect; that, on the contrary, from cases of brain disease has a very marked effect, which is a distinct although temporary fall of pressure. The authors achieved precisely the same result from the injection of choline. They have also demonstrated the latter substance chemically in these pathological fluids. As they have found the blood of these patients to be toxic and in the same direction, it is a perfectly plausible supposition that the choline liberated by the breaking down of the nervous tissue of the brain is absorbed into circulation, causing the peculiar vaso-motor symptoms associated with these troubles.

Dr. Atwater, of Middletown, Conn., had a paper on "Alcohol as a Foodstuff." His experiments, four in number, were performed in the following manner: A man whose body had previously been brought into a state of metabolic equilibrium was placed in a large calorimeter of especial construction; he was fed on diet just sufficient to provide for the necessities of his body, the excreta and air being chemically examined, and the energy given off as heat measured in calorics. In the second series of experiments a small portion of the carbohydrates of his diet was substituted by an amount of alcohol representing the same quantity of potential energy. The author found that the alcohol so ingested was practically entirely oxidized, that the carbohydrate equilibrium was unaltered, but that the alcohol seemed to exercise a slight protective influence over the nitrogenous destruction. These results remained true both for the resting and the working man. The author concluded that alcohol in small quantities was completely oxidized in the body, and that the organism was able to use the carbohydrate presented in this form for the purposes of nutrition—in short, that alcohol was a true food-stuff.

An interesting discussion followed this paper, Professor Meyer, of Marburg, objecting that although the facts of Dr. Atwater were true, nevertheless alcohol was not a true foodstuff, because this extra carbohydrate was not shown to be necessary or useful to the body. To this Professor Bowditch replied that the same was true of bread. We could subsist very well without bread if we were furnished sufficient carbohydrate in another equally assimilable form. Dr. Atwater added that this much was certain: with a diet otherwise insufficient for the work performed, the alcohol prevented the loss of bodily weight—the organism was not driven to feed on itself for a source of the expended energy.

Besides the papers of which abstracts have just been given, there were read such a mass that their mere titles would fill a page. They were, however, mostly of more interest to the physiologist than to the practitioner.

On Friday, August 26, at the general meeting, after attending to some routine business and adopting resolutions of thanks to the various officers whose efforts had made the Congress the success it was, it was decided to hold the next meeting in Turin, Italy, in September, 1901.

President Foster then declared the French International Congress of Physiologists closed.

---

### A NEW BREAD FOR DIABETICS.\*

---

N. S. DAVIS, JR., A.M., M.D., CHICAGO, ILL.,

Professor of Principles and Practice of Medicine, North-Western University Medical School, etc.

---

I do not propose to present a formal paper to this Section, but to exhibit a flour and samples of bread which have been invented and prepared by a patient of mine, who, himself a diabetic, has for a number of years experienced the need of a substitute for wheat bread.

When treatment is first begun a diabetic should be placed upon a strictly non-saccharine and non-amylaceous diet, in order to determine how far the disease can be controlled by diet. This change should not be made abruptly, but gradually, during a week or ten days' time. If the change is made abruptly, appetite often fails and malaise increases; in some cases untoward symptoms may arise and coma has not infrequently been observed to develop.

A rigid diet cannot be long maintained. Nor is it necessary

---

\* Presented to the Section of Materia Medica, Pharmacy and Therapeutics at the Forty-ninth Annual Meeting of the American Medical Association, held at Denver, Col., June 7-10, 1898

so to do. In the least severe cases a modicum of carbohydrates can be assimilated. Just what this quantity is can only be ascertained by a careful study of each case. Frequently, during exacerbations of the malady, a relaxation of diatetic restrictions proves better than an increase of them. Whenever a strictly diabetic regimen must be adhered to, and whenever one only slightly modified from this must be employed, a substitute for wheat bread is craved. No one article of food is more univerrally missed, if in must be omitted, than bread. A variety of flours have been invented as substitutes for wheat flour. Gluten flour is more universally used than any other. It is almost impossible to make palatable bread from pure gluten. All the gluten flours upon the market contain starch in considerable percentage. It is better to permit diabetics to eat a given amount of wheat bread instead of unlimited amounts of gluten bread, which contains on the average half as much starch as ordinary bread and is less palatable. Bran cakes, soya biscuits or bread, almond cakes, cocoanut cake and peanut bread are other substitutes for wheat bread.

Bran flour contains a considerable percentage of starch. The cellulose which it contains makes it indigestible and liable to provoke diarrhea. Soya flour makes bread which is not very palatable. Analyses of the flour vary much, stating that it contains from 3 to 45 per cent. of starch. The most trustworthy analyses accredit it with about 20 per cent. of amylaceous matter. Almond flour contains from 4 to 5 per cent. of sugar, but no starch. It is so rich in oil that it also often produces dyspepsia. Cocoanut flour contains a small quantity of sugar. From it a variety of bread-like or cake-like preparations can be made. Peanut flour contains about 14 per cent. of carbohydrates. It does not make as palatable preparations as either the almond or cocoanut flours.

The flour which I show you is made from one of the many edible pine nuts. It is fine, slightly yellow, and bland in taste. The flour contains no starch and only 7 per cent. of cane sugar. If bread or other articles of food made from it are raised with yeast, this sugar is decomposed so that only a fraction of 1 per cent. can be found in the product. I have prescribed it for a dozen or more diabetics during the last few months. With few exceptions the bread and cake made from it is relished and found to be an agreeable substitute for wheat bread. Two patients at first relished it, ate it with avidity, but at the end of a week or ten days found that it caused indigestion. I urge patients to use it moderately, not *ad libitum*. Certain patients are told to use it at two of the daily meals and are permitted to use a moderate amount of wheat bread at the third meal.

This bread does not produce gases when it ferments. If it does not agree with the patient it produces loss of appetite and

disinclination for it. It contains 19.82 per cent of oil; sweet almonds contain 53 per cent., and cocoanut 70 per cent. It is therefore less likely to produce indigestion than flour products derived from either of the other nuts. It contains 55.65 per cent. of albuminoids; 6.42 per cent. mineral matter, and approximately 4 per cent. of fibre.

It is essential to the treatment of diabetes that nitrogenous waste should be lessened. This can be accomplished in part by prescribing oils and fats instead of starches and sugars. All these substances retard nitrogenous metabolism. The oil in these nut flowers is therefore not objectionable, but desirable if a patient's digestion is fairly good.

I believe the best results are obtained, if substitutes for wheat bread must be prescribed for diabetics, when patients are gradually accustomed to their employment and when they are used intermittently rather than constantly. Bread, muffins, pancakes, cake, cookies, etc.—some of these must be made with baking powder instead of yeast, and contain a small per cent. of cane sugar. They are not as well adapted as the others are for diabetics, but are useful for those dyspeptics who do not tolerate amylaceous food.

### THE MICROBE OF CONTAGIOUS PLEURO-PNEUMONIA.

The essential lesion of contagious pleuro-pneumonia of cattle (a peri-pneumonia of the French) consists in the distension of the interlobular connective tissue spaces by a large quantity of inflammatory exudate. If a drop of this serum is inoculated into the subcutaneous tissue there will appear, after from nine to twenty-five days, an inflammatory engorgement of varying dimensions, which is often followed by death. At the autopsy there is found a large quantity of yellowish serum in the tissue spaces, which is here and there coagulated into gelatinous masses. The exudation sometimes amounts to several liters. Animals that recover after a slight sickness of a few days become refractory to experimental inoculation as well as to natural contagion.

This fluid, so virulent for animals of the bovine species, is without action upon other species. These facts were, according to Nocard and Roux,\* demonstrated by Willems in 1850.

The demonstration of the specific microbe of pleuro-pneumonia, its isolation and cultivation, would constitute a very desirable progress. Heretofore all attempts, in innumerable ways, in that direction have failed.

\* Le microbe de lapéripneumonie : Annales de l'Institut Pasteur, xii, 1898, p. 240

The introduction of collodion sacs for the purpose of cultivating microbes in the living body, such as was practised by Metchnikoff, Roux and Salembeni, in their study of the toxin and antitoxin of cholera, appears to have been a very happy idea. The wall of collodion constitutes a perfect barrier to the microbes, as well as to the cells. The microbes may multiply in the interior of the sac, because they are protected from the phagocytes. On the other hand, this wall is permeable to fluids and substances dissolved in them, forming a perfect osmotic membrane. In this way poisonous substances produced by the bacteria pass outward, so that the microbic auto-intoxication does not take place, and, finally, the substances in the serum of the animal used may enter the sac.

Nocard and Roux employed such sacs in the study of the microbe of pleuro-pneumonia, inoculating the bouillon which they contained with a trace of the serum of pleuro-pneumonia and then inserting the sacs into the peritoneal cavity of rabbits. In from fifteen to twenty days the sacs were found to contain an opalescent fluid, slightly albuminous, which contained neither cells nor microbes that would grow on the ordinary media. With a magnification of 2,000 diameters and a very strong light, a great quantity of very small mobile points were seen, of such minuteness that it was difficult to say, even after staining, what their exact form could be. No such bodies occurred in the fluid of a sac of collodion, inserted in the same manner without having been inoculated with the pleuro-pneumonic exudate. Sub-cultures of the fluid of the first sac gave exactly similar results. Incubating rabbits, which become emaciated, may die before the day fixed for the autopsy. The blood of the organs of such rabbits failed to give any growths of bacteria after inoculation upon various media and even into collodion sacs. Death resulted—in all probability an intoxication due to outward diffusion of the products of the microbe. Here is a new example of an animal being very susceptible to the toxins of a microbe to which it is unsusceptible.

Collodion sacs, inoculated in the same way as described and inserted into the peritoneum of guinea-pigs, did not give any growths. Hence, it may be concluded that it concerned a special micro-organism, which multiplied in successive cultures in the medium produced by osmotic changes in the interior of the fluid in the collodion sac inserted into the rabbit's peritoneal cavity. This micro-organism was found by successive inoculations into cattle to be the virulent agent of pleuro-pneumonia.

Subsequently it was found possible to cultivate this microbe outside the abdomen of the rabbit by inoculating sterilized bouillon which had been allowed to remain in the peritoneal cavity of a cow or of a rabbit in collodion sacs for several weeks. Then

the bouillon acquired the properties necessary for the growth of the pleuro-pneumonic microbe in the test-tube; further experiments showed that the addition of four drops of the serum of the rabbit or of the cow to 5 cc. of a solution of peptone\* rendered this also a suitable culture-medium, so that it is now possible to cultivate the microbe of pleuro-pneumonia in the ordinary way. It will now be possible to study its toxin and make attempts to modify its virulence.

These extremely interesting observations point the way in which it may be possible to study certain other diseases, the specific microbe of which has not yet been isolated. It is very interesting also to note that Nocard and Roux have brought into prominence a micro-organism of such minuteness that the ultimate limits of our present means of magnification have practically been reached. Really the final criterion of the presence and multiplication of a micro-organism in the cultures described is furnished by inoculations.—*Jour. Am. Med. Asso.*

### EXPERT TESTIMONY.

In the discussion, recently published, on expert testimony, before the Philadelphia County Medical Society, the few points that were made clear are of great importance. In the first place, the attitude of mutual understanding, so much to be desired, between physicians and lawyers, was in a degree attained by having members of the bar contribute to the discussion. The debate was far removed from the arena of the court-room, and therefore lifted to a higher plane of intelligence and impartiality than is always afforded at the trial of cases. There were no "jury-points" to be made, no hypothetical questions to be asked, no life or property at stake.

The difficulties in the way of arriving at exact knowledge, especially in cases of alleged insanity, were frankly stated by some of those present. There was little disposition to claim infallibility in such cases. The points were made clear that some latitude for variations of opinion may be granted without assuming that of two experts who testify on opposing sides one is necessarily either disingenuous or incompetent. The uncertainties of legal processes themselves were pointed out, and it was well claimed that the precedents set by the courts themselves, in the system of appeal from a lower to a higher court, and in the practice of advocates to assume opposing sides without reproach to their knowledge or

\* As recommended by Martin, *Annales de l'Institut Pasteur*, 12, January, 1898.

their conscience, may be cited by experts when they themselves take sides and attempt to sift and to allot due importance to a mass of confusing facts. It was made clear that it is not the part of an expert witness to be an advocate, much less to decide the issue. That he is ever put in such a position is usually as much the fault of the court and the lawyers as his own. He is simply a diagnostician, and with the bearing of his diagnosis upon the issue of the case he has, or should have, nothing to do.

As for the various panaceas offered now and then for the evils attendant upon expert testimony, the view seemed to be that none of them is likely to be either efficient or practicable. It was pointed out that a State board of experts, or a commission of experts appointed by the court, or a consultation of experts agreed upon by counsel, would be no more competent to deal with the vexed and obscure questions of insanity and trauma than are medical witnesses as now employed. There would still remain the same grounds for variations of opinion, and, what is more nearly vital, the same inalienable right of a prisoner or a litigant to call his own witnesses. The most that can be attained, and it is surely sufficient, is a high standard of practice, governed by the same laws of ethics and of science inside the court as out of it; and for his special fitness to conform to such a standard every expert is to be judged according to his own qualifications and his repute as a man and a scientist.—*Ed. Phil. Medical Journal.*

---

### THE GROWTH OF PEDIATRICS.

---

The history of pediatrics is peculiar in that, neglected for years, it has developed with extraordinary rapidity during a single decade. In view of the fact that infants and children form a large proportion of all patients treated by medical men, it would seem natural to expect that study of their diseases would have received early attention. On the contrary, they received such scant attention from medical teachers and writers that the young doctor went forth in almost total but not blissful ignorance of the patients who were to compose such a large part of his practice.

The specialty of pediatrics, as at present understood, is barely thirty years old. It is true that numerous and monographs upon the diseases of children were published during the early half of the century and even earlier. Several books were also written. In this country Dewees published a work on diseases of children in 1825. James Stewart published a similar work in 1843, and D. Francis Condie one in 1847. They were, however, inferior to the current works on medicine and surgery. In 1848 J. Forsyth

Meigs published his book, which was superior to anything which had yet appeared. A. Jacobi and J. Lewis Smith, by coincidence, published their first medical papers in 1858. The first edition of Dr. Smith's book appeared in 1869. Until 1889, however, pediatric literature was meagre. There was no text-book on the diseases of children wholly satisfactory to teachers and writers.

Jacobi must be regarded as the apostle, if not the actual founder, of the department of pediatrics as we understand it in America to-day. "In 1857," says Adams, "Jacobi pressed the button which set the pediatric clinic in motion, and in 1897 he had the glorious satisfaction of seeing the fulfilment of his fondest hopes in the universal recognition of pediatrics as a distinct branch of medicine."

In 1860 he was appointed to fill the first special chair on diseases of children in this country, which had been created for him in the New York Medical College. Pediatrics made slow advancement as a specialty, however, and it was fully twenty-five years before a full professorship was established in any college. Full professorships now exist in many of the best medical colleges, and new ones are being created each year.

The year 1889 marks an epoch in pediatrics, for in that year Keating's Cyclopeda was issued. It is true that much good work had preceded this and made its publication possible. That work had, however, been as unostentatiously as it had been faithfully done, and the production of the cyclopeda was a surprise to the profession. Since that time no department of medicine has made more substantial advancement than has pediatrics. Though their number is not large as compared with some specialties, none can boast of better trained observers or more conscientious workers, nor has any other department produced a mass of literature of higher grade. It is indeed evidence of a magnificent personnel, that a department so meagre in satisfactory literature ten years ago should to-day be so rich. To speak only of the English language, the great works of Keating, Holt, Rotch, Starr, Jacobi, Ashby and Wright, and Sachs would alone shed lustre upon any department of medicine, not to enumerate new editions of older works and a surprisingly rich periodical literature.

Pediatrics is rich in achievement as well as in literature. Not to mention personally a score of bacteriologists and pathologists, she claims as her own son, O'Dwyer, whose achievements have brought honor upon all medical men. Progress made in the feeding of young children and the management of infancy is but one of the many achievements of pediatricists. He is indeed blind who refuses to see in pediatrics to-day one of the most important special departments of medicine.—*Archives of Pediatrics*, December, 1898.



### ANOTHER PHASE OF HOSPITAL ABUSE.

We had last week an example of a phase of hospital abuse that convinced us of the truth that when institutions are changed from their legitimate social uses and the aims of their founders and supporters, there are no strange and morbid ends which they may not serve. The term "hospital abuse" has generally been used to indicate the excessive use of hospitals by patients able to pay, the license whereby the community in its craze is debauched by medical communists to the degradation both of the profession and the people. From one evil another, even its opposite, is quickly begotten, and we now find a condition existing whereby the most worthy and the most needy are excluded. A poor girl had been thrown out of work by purulent conjunctivitis, and having no home, her physician tried to secure admission for her to some hospital. The progress of the disease threatened quick destruction of vision, and her sad plight compelled the physician to help her to get a permit either to some of the institutions to which she had already applied or to others. Several hours were lost in learning that many of these "charitable" institutions had made a rule absolutely excluding cases of "infectious" disease. "Does pus from an eye fly spontaneously through the air to other eyes?" "Is gonorrhœa of the eye more contagious than gonorrhœa of the urethra?" "No, but it costs too much for segregation and special nurses." "Well, but what are hospitals for?" Blank answer. A few more hours were wasted in learning at other hospitals that every ward was full, and every cot occupied with sick soldiers. "Ah, you are preparing victorious statistics and unanswerable arguments to lay before the legislative appropriation committee when it comes to dividing the State treasury surplus? Have the local poor and afflicted citizens no rights?" Answer again blank. The indignant physician then applied to the Poor House, much to the shame of the patient, who thought it a "disgrace," and he was told no admission could be granted except upon the order of the Ward-Physician; but this man was absent from home. As a last resort a trip was made to the Central Office of the Bureau of Charities and Correction, to find that, being Saturday, the offices were closed, and of course would not be open until Monday morning. A carriage was now hired, and the patient driven to a hospital which, being under Catholic direction, could not receive any State appropriations, and there at last the sufferer was received. The greater part of a day and several dollars had been spent in behalf of one for whom, if for any, one would suppose the doors of these so-called charitable

institutions would be opened especially wide. We beg every legislator to demand State control as the condition of State aid to such institutions; we beg every contributor to the funds and every dancer at the "Charity Balls" to ask, "Will my servant, if dying, be admitted to your wards, or if she is suffering from sore eyes or from some other not violently contagious disease?" And it is time that all of us should ask concerning the true objects of hospitals, for whose benefit they are carried on, and by what rules and customs they are governed.—*Philadelphia Medical Journal*.

---

### Correspondence

---

#### "THAT YE MIGHT HAVE LIFE."

To the Editor of DOMINION MEDICAL MONTHLY :

SIR,—We are sometimes apt to compliment ourselves as Canadians upon our most excellent judiciary system and the humanitarianism which permeates and tempers the administration of our public affairs. Our ideals of political freedom are offended by the revelations of a Kenman while he recites the sorrows of political exiles in Siberia, or recounts the butcheries of the Spanish colonization. We pretend to be horrified when a white mob, crazed by race prejudices and bad whiskey, defies justice and murders a few negroes; or when a dozen ignorant, abused and half starved miners are shot down because they have offended the refined iniquitous natures of commercial banditti, legalized in their rapine by presuming to cherish desires for individuality and a measure of justice, and even many intelligent and possibly super-sensitive ladies may suggest that there may be a wrong perpetrated in the Chinese slavery which is by no means infrequent in this very city. Yet we are tolerating, if not fostering, a form of slavery incomparable in its experience of distress to anything I have mentioned.

Macbeth, in speaking to the doctor, says: "Canst thou minister to a mind diseas'd, pluck from the memory a rooted sorrow; raze out the written troubles of the brain, and with some sweet oblivious antidote cleanse the stuff'd bosom of that perilous stuff which weighs upon the heart?" The answer comes from the four quarters of our Dominion, a mighty affirmative from Hobbs, of London, repeated forty-seven times; from Burgess, of Montreal; from Holmes, of Chatham, and in a minor strain from the extreme west of our Dominion, and yet governmental obstinacy decrees that the benefits of modern discoveries must not interfere with

the vested prejudices of asylum superintendents ; that the unfortunate inmates of our provincial institutions shall not have extended to them the chance of liberation from bodily disease and mental thralldom, which is the gift of the surgery of to-day, and that a small percentage of our population be kept in the throes of mania, melancholia, and various conditions of mental abnormality, who can be, and should be, restored to their home and friends and once more take their place in society.

Again, with reference to the commitment to the asylum : should a case of insanity develop in the municipality, the course of procedure is that the patient be given into the hands of the police, sent to the cells, and there confined until the legal necessities are complied with. Medical men are not infallible, and it is by no means rare that the patient has been judged insane, when the symptoms manifest were those of acute disease. This unhappy condition of affairs has been complained of by our excellent municipal medical officer, Dr. Fraser, who has seen the injustice and harshness of the treatment of such cases. In view of this condition and also of the fact "of the recent discoveries in the treatment of lunacy," the Board of Directors of the Jubilee Hospital, ever awake to the interests of the time, are contemplating the erection of a special ward for the care and treatment of insane patients. This is a step worthy of commendation, and one that might be earnestly recommended to boards of similar institutions in other cities, for we must now draw our pen through the phrase, "Insanity or other incurable disease," so often found in the by-laws of public hospitals, and accept as a fact, fully and satisfactorily proven, that modern surgery can extend hope to at least 25 per cent. of our female asylum population.

I see no reason why analagous treatment might not be suggested in connection with the male insane ; it is at least worthy of trial.

In this month's issue, under the head of "The Treatment of the Insane in Private Practice," I give a report of examination and treatment of my cases up to date.

ERNEST HALL.

Issued January, 24th, 1899,  
P. H. BAYCE, Secretary.

**MONTHLY REPORT.**

Issued by the *Provincial Board of Health of Ontario for December, 1898.*  
Showing the deaths from Contagious Diseases in the Province as reported to the Registrar-General by the Division Registrars throughout the Province.

YEAR.	MONTH.	Total population reported.	Total municipal pallies reporting.	Total deaths reported.	Scarlatina.	Diphtheria.	Measles.	Whooping cough.	Typhoid.	Tuberculosis. (Consumption.)	Rate per 1,000 per annum.
1898....	December .....	2,173,906 96%	687 92%	237	10	51	2	12	21	141	0.8
1898....	November.....	1,153,415 97%	677 91%	284	17	59	6	6	50	146	0.8
1898....	October .....	2,200,072 97%	707 94%	272	14	39	4	8	54	153	0.8

YEAR.	MONTH.	Total population reported.	Total municipal pallies reporting.	Total deaths reported.	Scarlatina.	Diphtheria.	Measles.	Whooping cough.	Typhoid.	Tuberculosis.	Rate per 1,000 per annum.
1897....	December .....	1,549,914 89%	560 75%	218	5	39	0	13	22	136	1.0
1897....	November.....	1,529,528 88%	563 75%	221	5	43	3	9	34	127	1.0
1897....	October .....	1,596,385 71%	509 68%	216	0	44	1	8	45	118	0.9

Population of Province, 2,263,492.

Municipalities of Province, 745.

N.B.—Division Registrars will please notice that the Act requires that a return be made before the 5th of each month, whether any deaths have occurred or not.

# DOMINION MEDICAL MONTHLY

AND ONTARIO MEDICAL JOURNAL

---

EDITOR:

BEATTIE NESBITT, B.A., M.D., F.C.S.

TERRITORIAL EDITORS:

DR. J. DUNCAN, Chatham.

DR. M. F. LUCAS, Ingersoll.

DR. W. J. WEEKES, London.

DR. J. CAMPBELL, Seaforth.

DR. GILLIES, Teeswater.

DR. H. R. FRANK, Brantford.

DR. A. R. HARVIE, Orillia.

DR. H. J. HAMILTON, Toronto.

DR. A. J. CREASOR, Toronto.

DR. J. S. SPRAGUE, Stirling.

DR. C. J. CHIPMAN, Ottawa.

---

Address all communications to the Publishers, DOMINION MEDICAL MONTHLY, 77 Grosvenor Street,  
Toronto, Canada.

---

Vol. XII.

TORONTO, JANUARY, 1899.

No. 1.

---

## “SCHOOL INSPECTION BY MEDICAL OFFICERS.”

We see by the *Lancet* that the authorities of Berlin have decided to appoint medical officers to the municipal schools. There has always been among the more advanced members of the profession a decided feeling that a great deal of sickness could be avoided by a thorough inspection of school children. Not only this, but the fact is apparent at once that with our school system, which is one of the most high pressure systems in the world, a careful physician could see that the weaklings were not forced into a competitive strain that would certainly be injurious to them. Not only should we have a system of inspection, so as to guard against all forms of contagious diseases, but also a physician should have the authority to regulate the course of study, so that those children who come to the schools physically or mentally weak should not be overstrained, but should have a course adapted to their strength and needs. Many teachers and school managers object to this, because they think it would undermine their authority, and also affect discipline. We are satisfied, however, that the natural tact and courtesy, and the knowledge of human nature possessed by our physicians, would prevent any difficulty of this kind, and that the influence of such a system here would be of immense value. In fact it has been in Wiesbaden, where such a system has been in force for some time, so that any feelings of this kind are totally unfounded. The authorities in Berlin have

started out with a set of rules, which we reproduce. Of course, in a military system like Germany, everything is carried out on military principles, and so everything smacks of the "orders of the day." The following are the rules:

1. They will examine children as to their health before they enter a school.
2. In cases of bodily or mental abnormalities they may recommend the adoption of special instruction.
3. They will have to look after children who are absent from school without sufficient reasons.
4. They will have to advise the head master in cases of infectious diseases.
5. They must give notice to the school board when they have found the health of the children unfavorably affected by the unhygienic conditions of a school.
6. They will have to be present at a certain hour at the school once a fortnight, so that the masters may obtain their advice in individual cases.
7. They will have to control the class-rooms without reference to the hours of instruction.
8. All the medical officers of schools will have to meet regularly under the presidency of a member of the school board to discuss matters relative to the hygienic conditions of schools.

It will be seen that the medical officers will naturally be brought in pretty active contact with teachers; but, as stated above, we believe that even with such a cast-iron set of rules here, with the good sense and judgment of both teacher and physician, no trouble would accrue, but only benefit to this and succeeding generations in the improved present condition of our school children, and the guarantee that the strain of the school period will not be an overdraft on the bank of good health.

---

#### "MORTALITY TABLES."

---

There is possibly no greater subject of dispute between the various insurance companies than mortality tables. The reason of this is that the methods hitherto used have not been the most scientific. A pleasing variety is the last list that has been published by Dr. Tattersall, medical health officer of Oldham, England. His table is constructed on the graphic plan, first applied to this purpose by Dr. Newsholme, of Brighton. The description of the graphic method of Brighton life tables are reproduced by Dr. Tattersall, his four plates making excellent practical illustrations of this method, than which we may say there is no more

simpler and more decided system of obtaining the necessary data for life tables. There have altogether been seven series of life tables—two of these, as mentioned by the graphic method—published, dealing with the mortality of the different English towns during the period 1882 to 1890. These were, in order: Manchester, Brighton, Glasgow, London, Portsmouth, Haydock and Oldham. Some of the results shown by these tables may be pointed out. For instance, the expectation of life at birth in Oldham is, for males, 36.9 years; Manchester, 34.7; Glasgow, 35.2; Brighton, 43.6. At the age of ten the expectation, taking the places in the same order, is 43.8, 42.7, 44.3 and 40.1 years. Dr. Tattersall remarks: "We would expect Oldham, in view of its well fed, well paid, and well housed population, to have a much better expectation of life than Glasgow, but this is not the case." He considers that part of this may be due to the exposed position of the town, situated as it is on the verge of the Pennines on a stratum of clay. This is borne out by the great mortality in later years of life, the rate, however, being somewhat higher in our period. For instance, take the basis of 100,000 males born, there survives in ten years in Oldham 67,157, as against 81,882 in the salubrious sections; but we find the condition much worse at sixty years, for then there are only 27,308 left in Oldham against 52,007 for the healthier sections, so that we see that out of one hundred children born in Oldham only twenty-five are living at sixty years, while in the better favored sections 50 per cent. survive.

---

### ABORTIONISTS.

---

We have so often in these columns spoken of the criminal character of many of the advertisements contained in the lay press, not only in this country, but on this continent and also in Europe, that it seems like a useless iteration to protest again. We refer to the various forms of pills which are advertised not to be taken during pregnancy, the implied suggestion being that they would relieve this condition, and it is from this implied suggestion, and that alone, that the proprietors receive the profits by which the newspapers are paid to prostitute themselves. We are pleased to see that an entirely new aspect has been thrown on this class of advertising by the action of an English judge, who was evidently possessed of sound common sense. Recently in London a firm of these abortifacient manufacturers, after selling goods to customers, who replied to their advertisements in the daily press, endeavored to blackmail these customers by the threat of legal prosecution "for the awful crime of attempting to procure abortion

and preventing birth" unless they forwarded ten dollars. The judge in trying the case stated what everybody knows to be a fact, which nobody ever had the sense to make law, that newspapers publishing advertisements of remedies that were, or were evidently meant to be, considered abortifacient in their action, were amenable to legal prosecution as accessories before the fact. The effect has been immediate and widespread, and eminently practical, for the London police department have issued a public notice stating that after a first warning all newspapers inserting such advertisements will be liable to prosecution for "*inciting crime*." Of course the newspapers argue with the disingenuousness of a stage child, that they publish these advertisements in perfectly good faith. It would be interesting to compare the rates received for Tansy Pills and Departmental Stores, the illegitimate and the legitimate, the comparative rate for publishing articles of virtue and articles of vice. So much for disingenuousness. On the other hand they may say that the medical profession say that the goods they are handling are only quack remedies, that they will not produce the effect that the manufacturers imply. They are welcome to take any horn of the dilemma, for if they are not criminal participants in abortion proceedings, they are parties to defrauding the public who purchase these articles on the advertising faith of their columns. One journal in this city, always independent, always vigorous, and always clean—we refer to *Saturday Night*—handled this matter without gloves a short time ago. Everything they said was absolutely right. We heartily endorse every word of it, and we are sure that they will agree with us in urging the police department here to follow the English practice, and give their attention to the nostrum columns of the public press. They will certainly have less to do in other directions if they keep from the youth of the land the glaring head lines that vice while pleasant, is by no means inconvenient—that for dangers, but thought of, remedies are advertised.



### Editorial Abstracts.

---

#### INFLUENCE OF BACTERIA UPON THE TOXICITY OF STRYCHNINE.

BINDA, C.—Influence of bacteria upon the toxicity of strychnine. (*Giorn. di Med. leg.* 1897, p. 126). *Bacillus subtilis* diminishes the toxicity of strychnine solution only slowly and slightly.—*From Arch. ital. de Biol.*, v. 29, 1898, p. 241.

---

#### GLYCOLYTIC ENZYME IN MUSCLE.

BRUNTON AND RHODES.—Glycolytic enzyme in muscles. (*Cent. f. Physiol.* 1898, p. 353.) Juice squeezed out of muscles by hydraulic pressure, when perfectly fresh, exerts a distinct glycolytic action on diabetic sugar and dextrose. It loses this property in a few days. They are undecided as to whether it is transformed into a zymogen or simply decomposed.

---

#### ACTION OF ATROPINE UPON THE URINARY SECRETION.

LAZZARO, E. AND PITINI, A.—Action of atropine upon the urinary secretion. (*Archiv. di Farmacol.* 1897, p. 209.) By catheterizing the ureters of dogs and rabbits with and without the vagus intact, to which atropine had been given. It was proved that the vagus nerve has a direct action on urinary secretion, and that atropine acted upon the secretion of urine by paralyzing the vagus terminals in the kidneys.—(*From Arch. ital. de Biol.*, v. 29, 1898, p. 242.)

---

#### RELATION BETWEEN THE THYREOID GLAND AND THE FEMALE SEXUAL ORGANS

DE VOOGT, G. N.—The relation between the thyreoid and the female sexual organs. (*Cent. f. Gynækol.* 1898, p. 713.) From the fact that goitre most commonly begins at puberty, or during the senile involution of the genital organs, and that Basedow's disease is more common in women than in men, the view has been held that there is a direct relation between the thyreoid and the female genital organs. De Voogt, however, opposes this inference, claiming that the appearance and cessation of menstruation and goitre are the results of the systemic changes occurring at these periods. He holds that Hofmeister's investigations are not conclusive, as he also found changes in other organs beside the ovaries after thyreoidectomy, and while goitre is more common in women, yet when it does occur in man it occurs especially at these periods. In support of his view he cites the following case: A

girl fifteen years old with goitre was treated with potassium iodide and iodothyron without success. Menorrhagia soon began, and the examination revealed a dermoid cyst of the right ovary. Left side normal. This was removed, but still no diminution in the size of the goitre occurred. On the hypothesis that the goitre was due to an heightened ovarian function it should have diminished in size, so that arguing from this case there is no direct relation between the thyreoid and the female genital organs.

---

ACTION OF POTASSIUM IODIDE UPON THE BLOOD OF SYPHILITICS.

COLOMBINI AND GERULI.—Action of potassium iodide upon the blood of syphilitics. (*Giorn. ital. d. Mal. vener.*, 1897, fasc. 1.) Iodide of potassium given during the early stage of syphilitic infection causes an increase in the number of red corpuscles, and in the amount of hæmoglobin. Continuing the administration one sees a diminution, and then again an increase. On stopping the iodide the number of red corpuscles and the amount of hæmoglobin tend at once to diminish, but there then follows a rise. The iodide serves to overcome the gravest syphilitic anæmias. With the improvement of the condition of the blood there is a marked increase in body weight.—(*From Arch. ital. de Biol.*, v. 29, 1898, p. 216.)

---

MICRO-CHEMISTRY OF NERVE CELLS.

MACALLUM, A. B.—Some points in the micro-chemistry of nerve cells. (*Brit. Med. Journ.*, 1898, v. 2, p. 778.) Nissl's spindles have lately been considered as integral portions of the nerve cells, comparable to the zymogen granules of gland cells. Mr. Scott, one of Macallum's pupils, by studying the cells in the anterior horn of the spinal cord of the embryo pig found that "these cells consisted almost entirely of nucleus, rich in stainable matter." Later this contains less chromatin and a material staining with toluidin—blue appears, at first near the nucleus, but later is distributed throughout the cell. This substance then appears as granules, and finally forms the spindles. It seems that the spindles are therefore derived from the nucleus. They resist peptic digestion, but slowly yield to trypsin, they are therefore similar to nucleo-proteids. Further chemical examination shows them to consist of nucleo-proteid, and contain both phosphorous and iron.

---

BLOOD CHANGES AFTER EXPERIMENTAL THYROIDECTOMY.

LEVY, A. G.—Blood changes after experimental thyroidectomy. (*Brit. Med. Journ.*, 1898, v. 2, p. 608.) In dogs, after removal of the thyroids and parathyroids, there is usually a reduc-

tion in the number of red corpuscles about 25 per cent. and a diminution of hæmoglobin about proportional to the reduction in the number of red corpuscles. The leucocytes are, however, increased in number. Even with this anæmia the liver gives a reaction for iron with potassium ferrocyanide. The fibrin of the blood increases, and the sp. gr. diminishes. The proteids and total nitrogen vary, while the total amount of solids in the blood is reduced, and this reduction is more marked than in the case of the proteids, so that other substances beside proteids are destroyed. At times, however, the proteid loss is greater than that of the total solids. The blood ash does not vary much. Variations in the results Levy thinks due to the non-removal of the accessory thyroids around the aorta.

---

CLINICAL INVESTIGATIONS ON THE ACTION AND USE OF HEROIN.

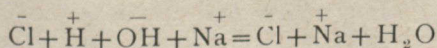
FLORET.—Clinical investigations on the action and use of heroin. (*Therap. Monats.*, 1898, p. 512.) Heroin, in sixty cases on which it was tried, proved a prompt and certain agent for combatting cough, and the irritation which induced the cough, also pains in the chest, and especially in catarrhal inflammation of the upper and lower respiratory tract, both in acute and chronic cases. It gave relief in cases of bronchitis sicca where codeine proved ineffective. It was likewise very efficient in relieving the cough of pulmonary tuberculosis, failing in only four out of twenty-five cases. In three cases of asthma bronchiale was the action very apparent. It *does not* seem to be indicated as an agent for the relief of pain in general, and especially in pain of the abdominal organs. No unpleasant symptoms, as vomiting, etc., were observed save in one case, where a temporary attack of giddiness resulted. Dose, 0.005-0.01 to 0.02, three or four times a day in powder, with sugar. It can be used in aqueous solution with a few drops of dilute acetic acid.

---

THEORY OF ELECTROLYTIC DISSOCIATION.

JONES, H. C.—Rise of the theory of electrolytic dissociation, and a few of its applications in chemistry, physics and botany. (*Bull. Johns Hopkins Hosp.*, v. 9, 1898, p. 136.) Pfeffer's quantitative measurements of the osmotic pressure of electrolytes and non-electrolytes were generalized by Van't Hoff as follows: 1. The osmotic pressure of solution of non-electrolytes is proportional to the concentration. 2. The temperature coefficient of osmotic pressure is very nearly  $\frac{1}{2} \frac{73}{T}$  of the osmotic pressure, for every degree centigrade. 3. The osmotic pressure of a solution is exactly equal to the gas pressure which the dissolved substance

would exert, if it were present as a gas, in a space equal to that occupied by the solution. A molecule exerts the same osmotic pressure as it would exert gas pressure under the same condition of temperature-laws analogous to those of Boyle, Gay Lussac and Avogadro. Van't Hoff then showed that electrolytes offer exceptions, equivalent concentrations giving greater osmotic pressure than non-electrolytes. Arrhenius studied the depression of the freezing point of liquids by electrolytes and non-electrolytes, and found the depression more marked from the electrolytes. He then proved a quantitative relation between the conductivity of these solutions and the depression of the freezing point of the solvent produced by the dissolved electrolyte, and showed that solutions of substances giving abnormally large osmotic pressure give abnormally great depression of the freezing point of the solvent, and conduct the current. Raoult had shown that the depression of the freezing point of a solvent by a dissolved substance, depended upon the relation of the number of parts of the dissolved substance, and of the solvent. In explanation of these facts Arrhenius proposed the theory of electrolytic dissociation. He supposed that when an electrolyte is dissolved in a solvent it breaks down into ions; that is, atoms or groups of atoms, which are charged. This dissociation depends upon the concentration, being more complete in dilute solutions, so that the properties of dilute solutions of electrolytes must be those of its ions. A molecule dissociates into at least two ions—a cation, which is charged positively, and an anion, which is charged negatively so that the properties of a completely dissociated solution is a function of two constants; and likewise the conductivity of these solutions is the sum of two constants. Dissociation can be calculated from the osmotic pressure of the solution, and also from its conductivity, both methods agree within experimental error. Dissociation may also be determined by the lowering of the freezing point. In terms of the theory of electrolytic dissociation a dilute aqueous solution of a strongly dissociated electrolyte contains no molecules, only ions. A solution of a base contains the hydroxyl anion, and a cation whose nature depends upon the base used. "A solution of an acid contains the hydrogen cation, and an anion whose nature depends upon the acid chosen." For example,



The theory explains the neutralization of acids by bases, referring them to a common cause, the union of the hydrogen and hydroxyl ions to form water. The strength of an acid depends upon the number of hydrogen ions present. As there are substances which do not conduct, and yet react chemically, we say absolutely that

molecules are incapable of reacting. By aid of this theory we are able to calculate the electromotive force of many cells. The theory is now being applied to biology. Kahlenberg and True have shown that the toxic action of a number of acids on plants is due to hydrogen ions, and the toxic action of a number of bases is due to the hydroxyl ions; and Loeb has shown that the power of a frog's muscle to absorb water in the presence of acids depends upon the number of hydrogen ions present. The theory has now been applied to disinfection by Paul and Kroëning.

---

PHARMACOLOGY OF SOME MORPHINE DERIVATIVES.

DRESER, H.—Pharmacology of some morphine derivatives. (*Therap. Monats.*, 1898, p. 509.) The fact that codein diminishes the respiratory volume would suggest the question as to whether among the morphine substitution products this action is peculiar to codein alone. In morphine there are three oxygen atoms, one in combination with the paroxasin ring, one in an alcohol and one in a phenol hydroxyl. Codein is formed by the substitution of the hydrogen of the phenol hydroxyl by methyl, as the ferric salts no longer yield a blue color with it, and now of morphine action there is only left the sedative action on the respiration. Substituting the acetyl group in the alcohol hydroxyl we obtain acetyl codein in which the sedative action on the respiration has disappeared, but the reflex excitability has become more marked than in codein. Likewise in morphine, ethyl and sulphuric acid the action on the respiration has disappeared, but the tendency to increased reflex excitability has increased. If now the hydrogen atoms of both hydroxyls in morphine are replaced by the acetyl groups as in the diacetic ester of morphine or heroin, the sedative action upon the respiration becomes more marked. In rabbits heroin slows the respiration in  $\frac{1}{100}$  of its lethal dose, while codein only slows it in  $\frac{1}{10}$  the same. The lethal dose of both being 0.1 gm. pro kilo. This is due to the more intense convulsive action of codein, as the increased demands of the muscles cannot be supplied by the slowed respiratory activity. Heroin in doses of 0.01 has proved effective in man in alleviating cough. The respiratory curve under heroin shows, besides the diminished frequency due to prolongation of the expiration, a distinct prolongation of inspiration. Cough remedies in cases of abnormal irritability of the respiratory mucous membranes should not too greatly limit the respiratory activity or weaken much the respiratory muscles. In catarrhal swelling, and in the stage of secretory activity, the entrance of air into the alveoli is slowed so that the slowed respiration from heroin gives the air time to enter, as the

conditions seem to demand. Under heroin it is the respiratory frequency which is especially affected, for the volume may be doubled—with large doses both sink, but especially is the frequency affected. Dreser showed by his method, described in Pflueger's Archiv, that the respiratory force was increased from 23-24 normal to 31-40 cm. of water so that more air is sucked in and with greater force. It seems to exercise a protective influence on the lungs as it causes muscular rest of the body generally, giving a reduction of  $\frac{1}{3}$ — $\frac{2}{3}$  of the normal O and a diminution of  $\frac{1}{2}$  CO<sub>2</sub>. Codein on the contrary increases the O consumption. In dyspnea of pneumonia, etc., by lowering the need of O, heroin may be used, especially as there is no loss of consciousness. Since the heat production from burning fat or albumen with the same amount of O is the same, therefore if the O is diminished, heat production is also diminished so that in hectic fever it serves as an antipyretic, economizing and not wasting the heat. The sensitiveness of the respiratory centre to lack of O and increase of CO<sub>2</sub> remains unchanged, while the sensitiveness to mechanical stretching of the lungs is diminished; this is especially marked in resistance to the expiration. The amount of O in the blood before and after heroin is practically the same. Kymographic investigations show the primary cause of death is due to a respiratory paralysis, and perfusion experiments show that it does not injure the heart more than codein phosphate.

---

### Physicians' Library.

---

*The Medical News Pocket Formulary for 1899.* Containing sixteen hundred prescriptions representing the latest and most approved methods of administering remedial agents. By E. QUIN THORNTON, M.D., Demonstrator of Therapeutics, Pharmacy and Materia Medica in the Jefferson Medical College, Philadelphia. In one wallet-shaped volume, strongly bound in leather, with pocket and pencil. Price, \$1.50, net. Lea Brothers & Co., Publishers, Philadelphia and New York.

A more helpful book it would be difficult to devise. No man, except a specialist like the author, can be expected to keep posted on all the new remedies and to reject those which are valueless, together with those which are outworn, leaving a net residue representing the body of the best therapeutics at date. Dr. Thornton has done this, arranging the prescriptions under alphabetical headings of disease, so that the medical man, be he physician, surgeon or specialist, can instantly run his eye over the authorita-

tive recommendations of the world's leaders in all the practical branches of medicine in the broadest sense of the word. The author has subjected each prescription to careful study and verification, and has appended useful annotations and indications as guidance in meeting the various stages and complications. Due attention has been paid to palatability and pharmaceutical elegance, points of increasing practical importance.

---

*Diet for the Sick.* By MISS E. HIBBARD and MRS. EMMA DRANT, matrons at two large hospitals in Detroit. 103 pages; board sides, postpaid, 25 cents. The illustrated Medical Journal Co., Detroit, Mich., Publishers.

This is the third edition of this handy and popular little bedside book. The recipes for sick dishes have all been tried, and are those largely used by the Detroit hospitals where the two contributors of them served as matrons. Added to these are various diet tables, as for anemia, Bright's disease, calculus, cancer, consumption, diabetes, dyspepsia, fevers, gout, obesity, rheumatism, uterine fibroids, etc., as given by the highest authorities. The booklet is intended to be given to the family by the physician, and for such purposes, one-half dozen will be sent, prepaid, on receipt of \$1.00.

---

Messrs. Lea Brothers & Co., announce for publication in March, 1899, the first volume of *Progressive Medicine*, a new annual which will be issued in four handsome octavo, cloth bound and richly illustrated volumes of about 400 pages each. The several volumes will appear at intervals of three months. In this age of unusual progress, so rapid is the advance in all departments of medical and surgical science that the need for condensed summaries which shall keep the practitioner up-to-date at the least possible expenditure of valuable time has become imperative. Many attempts in the way of Year-Books, Retrospects and Abstracts have been made to meet this growing need, but in nearly all of these the process of condensing has not been preceded by a sifting of the good from the useless, and consequently the reader is presented with a mass of information from which he must select with care and study the items which are useful and reliable. What the busy physician needs to day is a well-told tale of medical progress in all its lines of thought, told in each line by one well qualified to cull only that matter worthy of his attention and necessary to his success. He needs material which shall teach him all that the master of his specialty knows of the year's work.

It is with the object of presenting only such readable and useful material that these volumes are published, and every contributor to the pages of *Progressive Medicine* will say what he has to say in an original narrative form, so that every statement will bear a personal imprint expressing not only the views of the author cited, but the opinion of the contributor as well. To insure completeness of material and harmony of statement, each narrative will receive the careful supervision of the General Editor, Dr. Hobart Amory Hare, whose reputation will everywhere be acknowledged as ensuring practical utility in a high degree. Those associated with Dr. Hare in the production of *Progressive Medicine*, include a brilliant gathering of the younger element of the profession, well representing the class which is so energetically contributing to make modern medical history. With the appreciation of the self-evident utility of such a work to all practitioners, the publishers are enabled to ask the very moderate subscription price of ten dollars for the four volumes. The publishers offer to send full descriptive circulars and sample pages to those applying for them.

---

#### "PAMPHLETS RECEIVED."

---

"Chronic Catarrh of the Stomach." By CHARLES A. AARON, M.D. Reprinted from the *Pharmacologist*, Detroit, Mich.

"Are Complete Castrates capable of Procreation?" By F. R. STURGIS, M.D., New York. Reprinted from the *Medical News*, October 8, 1898.

"Intestinal Auto-Intoxication." By CHAS. D. AARON, M.D., Detroit, Mich. Read before the Detroit Medical and Library Association, October 11, 1897.

"Transillumination of the Stomach, with Demonstration on the Person." By CHARLES D. AARON, M.D. Reprinted from the *Medical Age*, June 10, 1898.

"The Radical Cure of Inguinal Hernia by Fowler's Method, with Report of Cases." By H. O. WALKER, M.D., Detroit, Mich. Reprint from the *Leucocyte*. Vol. VI., Nos. 1 and 2.

"On the Relation of the Inorganic Salts of the Blood to the Automatic Activity of a Strip of Ventricular Muscle." By CHARLES WILSON GREENE. Reprinted from the *American Journal of Physiology*, Vol. XI., No. 1, November 22, 1898.



A decorative border of fish, including cod and salmon, swimming in a circular pattern around the text.

# Scott's Emulsion

is an emulsion of cod-liver oil,

*Which contains the whole oil, all of it.*

It is not a mixture of wine or alcohol with a little iodine and bromine.

It will not intoxicate nor lead to the alcohol habit.

It does not depend upon a stimulant for its therapeutic power.

It is, however, precisely what it claims to be:

*The Best Norwegian Cod-Liver Oil.  
The Hypophosphites and Glycerine.*

Scott's Emulsion is a Food—not a stimulant.

Scott's Emulsion is a Fact—not an experiment.

Scott's Emulsion contains Fat—not a drop of alcohol.

Whenever cod-liver oil and the hypophosphites are indicated, we ask you to prescribe "Scott's Emulsion," always permanent and palatable.

**SCOTT & BOWNE. Toronto**

"Diseases of the Ear as a Specialty." By EMIL AMBERG, M.D., Detroit, Mich. Reprinted from the *Physician and Surgeon*, Detroit.

"Studies on the Healing of Wounds, with Special Reference to the Iodine Preparations." By PROF. N. ZUNTZ and DR. ERNST R. W. FRANK. Reprinted from the *American Meaico-Surgical Bulletin*, August 15, 1895.

"Further Observations on the Chemical Nature of the Active Principle of Suprarenal Capsule." By JOHN J. ABEL, M.D. Reprinted from the *Johns Hopkins Hospital Bulletin*. Nos. 90-91, September-October, 1898.

"Nosophen and Antinosine in the Treatment of Genito-Urinary and Venereal Diseases, with Report of Cases." By CLAUDE A. DUNDORE, M.D., Philadelphia, Pa. Reprinted from the *New York Medical Journal*, April 23, 1898.

"The Relation of Suppuration Shortening of the Limbs in Tuberculous Diseases of the Hip Joint." A study of one hundred and six cases. By RUSSELL A. HIBBS, M.D. Reprinted from the *New York Medical Journal*, November 5, 1898.