Technical and Bibliographic Notes / Notes techniques et bibliographiques

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

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

	Coloured covers / Couverture de couleur		Coloured pages / Pages de couleur
	Covers damaged / Couverture endommagée		Pages damaged / Pages endommagées
	Covers restored and/or laminated / Couverture restaurée et/ou pelliculée		Pages restored and/or laminated / Pages restaurées et/ou pelliculées
	Cover title missing / Le titre de couverture manque		Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
	Coloured maps /		Pages detached / Pages détachées
Ш	Cartes géographiques en couleur	1	Showthrough / Transparence
	Coloured ink (i.e. other than blue or black) / Encre de couleur (i.e. autre que bleue ou noire)		Quality of print varies / Qualité inégale de l'impression
	Coloured plates and/or illustrations / Planches et/ou illustrations en couleur Bound with other material /		Includes supplementary materials / Comprend du matériel supplémentaire
	Relié avec d'autres documents Only edition available / Seule édition disponible		Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from scanning / II se peut que
	Tight binding may cause shadows or distortion along interior margin / La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure.		certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été numérisées.
	Additional comments / Commentaires supplémentaires:		

THE CANADIAN PRACTITIONER AND REVIEW

EDITORS:

ADAM H. WRIGHT, B.A., M.D. W. H. B. AIKINS, M.D. EDMUND E. KING, M.D.

VOL. XXX.

JANUARY TO DECEMBER, 1905.

TORONTO:

THE CANADIAN PRACTITIONER AND REVIEW CO. 1905

INDEX TO VOL. XXX.

LIST OF CONTRIBUTORS.

Aikins, W. H. B., M.D., Toronto. Allbutt, T. Clifford, M.D., Oxford, Eng. Aylsworth, Geo. M., M.D., Collingwood.

Baines, Allen, M.D., Toronto.
Bingham, George A., M.D., Toronto.
Brown, J. Price, N.D., Toronto.
Bruce, H. A., M.D., Toronto.
Burnham, Geo. H., M.D., Toronto,
Burnet, J., M.A., M.B., Toronto.

Campbell, D. A., M.D., Halifax. Clarkson, F. A., M.D., Toronto. Copp, G. J., M.D., Toronto.

Duncan, J. T., M.D., Toronto.

Elder, Prof. J. M., Montreal. Evans, Laming, M.A., M.D.

Farncomb, T. S., M.D., Trenton. Fenton, Frederick, M.D., Toronto. Ferguson, John, M.A., M.D., Toronto.

Gallie, W.E., M.D., Toronto. Graham, J. S. A., M.D., Toronto. Greenway, G. E., M.D., Toronto. Greig, W. J., M.D., Toronto.

Hamilton, H. J., M.D., Toronto. Hanks, A. R., M.D., Blenneim. Hastings, Chas. J. C. O., M.D., Toronto. Hay, S. M., M.D., Toronto. Hicks, Everett S., M.D., Port Dover. Hooper, E. R., M.B., Toronto.

King, Edmund E., M.D., Toronto. King, Robert, M.D., Montreal.

Leitch, A., M.D., St. Thomas.

Marlow, F. W., M.D., Toronto.

Montgomery, Douglass W., M.D., San Francisco,
Cal.

Metzenbaum, Myron, M.D., Cleveland, O. Muuch, Francis, M.D., Paris, Ont. Meyers, Campbell, M.D., Toronto.

Olmsted, Ingersoll, M.D., Hamilton,

Playter, Edward, M.D., Toronto. Primrose, A., M.D., Toronto. Pritchard, Wm. Broaddus, M.D., Philadelphia.

Ryerson, G. S., M.D., Toronto.

Smith, W. Harley, M.D., Toronto. Stirling, J. W., M.B., Montreal. Stewart, John C., M.D., Halifax, M.S.

Thistle, W. D., M.D., Toronto. Treeves, Sir Frederick, Bart., London, Eng. Tweedy, E. Hastings, M.D., Dublin.

Waldo, Henry, M.D., Bristol, Eng. Webster, T. Shaw, M.D., Toronto. Wright, Adam H., M.D., Toronto.

EDITORIALS.

PAGE	PAGE
American Medical Association 221	Father of Laryngology
Asylum Appointments	Feeble Minded, Care of the 687
British Medical Act 34	General Hospital of Toronto, The Old 687
British Medical Association, The	Graduates of the University in Government . 341
Canadian Medical Association, The	Hospitals, Of Interest to
282, 339, 397, 579	Items
Canadian Medical Dinner in London, England 281	•
Canadian Medical Protective Association, The 98	Lodge Doctor, The
Canadian Preference League, The 161	
Convocation Hall, The 103	Medical Congress, International 690
· ·	Medical Council Registrarship
Deaths for October, 1904 44	Medical Faculty of the University of Toronto,
Deaths for January, 1905 163	The
Deaths for February, 1905 223	Medical Items
Doctor and Commercial Investments, The 279	
*	Montreal Meeting of the British Medical As-
Election of Dr. R. A. Reeve 636	sociation 578

4	INDEX	то	AOI"	XXX.		•	
O'Reilly, Dr. Charles Origin of Syphilis Osler's, Dr., Address t Physicians in the Gove Residence for Men in	nto, The446, 582 ut-patients in Glasgov Ability istion100, 281, 16 istion100, 281, 16 il	, 637 v 222 . 32 . 275 2 393 . 460 . 39 . 400 . 278 . 160 . 96 . 35 . 276	Toronto Toronto Toronto Toronto Toronto Toronto Salary Trained Transea Societ Tuberct Univers Uric Ac	Free Hosp General Hosp General Hosp General Hosp University University University Sursing tions of the Company of the Company Hosp Hosp Hosp Hosp Hosp Hosp Hosp Hosp	ital for Consuces it all for Consuces it al. 34, 99, 159, 160spital, New Science Commission by, the Profession, the Redinburgh it of the Needs Che.	283, 336, 342, 5 Superintend	55 598 17 14 84 33 06 38 51 42 35 96
	o	ВІТ	UARY.		•		
Agnew, Niven, M.D Austin, James Herber Barnardo, Thomas J., Bonnell, Charles Edga Buller, Frank, M.D Chadwick, Charles Rec Clarke, Thomas, M.D. Cook, Hermon Levi, M. Dewar, Dr	t, M.D. M.D., F.R.C.S. r, M.D.	. 604 . 587 . 642 . 642 . 642 . 694 . 694	Kelly, J Kirklan Lett, St Macken Macdon Meacha Mikulic Nelles,	. A., M.D., d, Archibal ephen, M.I. zie, John A ald, Davids m, W. W., z, Professor John A., M.	d S., M.D, M.D son, M.D M.D.	5 5	285 48 48 44 42 48 24 524
Dudley, A. Palmer Fee, Dr						6 5	

BOOK REVIEWS.

 Smith, William E., M.D.
 694

 Somers, Robert Henry, M.D.
 48

Spence, Harry W., M.D...... 166

 Tegart, Edwin W., M.D.
 642

 Thompson, David, M.D.
 226

Vivian, Reginald Percy, M.D. 48

Von Basch, S. R., M.D...... 524

Fitch, Salmon, M.D 642

Gant, Fred. James, M.D...... 524

Hinter, Geo. T., M.D. 166

PAGE	PAGE
Annals of Surgery	Bacteriology, The Principle of, by A. C.
tology, by H. Druck	Chemical and Microscopical Diagnosis, by Francis Carter Wood
Atlas and Text-Book of Topographic and Applied Anatomy, by O. Schultze 525	ology, A Manual of, by Dr. M. Klopstock and Dr. A Kowarsky

, PAGR	PAGE
Diagnostic Methods of Examination, A Treat-	Pathogenic Micro-organisms, including Bac-
ise on, by Prof. Dr. H. Sahli 599	teria and Protozoa, by William Hallock
Diet in Health and Disease, by Julius Fried-	Park and Anna W. Williams 702
enwald 171	Physician's Visiting List for 1906, The 697
Dietetics for Nurses, by Julius Friedenwald 600	Physiology and Hygiene, Introductory, by
Diseases of the Blood, by P. Ehrlich 349	A. P. Knight
Diseases of Children, by Marcus P. Hatfield. 228	Physiologic Therapeutics, A System of, by
Diseases of the Ear, Nose and Throat, by	Solomon Solis Cohen
John Johnson Kyle 228	liam M. Powell
Diseases of the Kidney, Diseases of the Spleen and Hemorrhagic Diseases, by H. Senator	Practical Massage in Twenty Lessons, by
and M. Litten 589	Hartvig Nissen
Diseases of the Skin, by H. Radcliffe Crocker 229	Principles and Practice of Medicine, The, by
Diseases of the Liver, Gall-Bladder and Bile	William Osler
Ducts, by H. D. Rolleston 49	Progressive Medicine, by H. A. Hare and
Diseases of the Nose and Throat, A Manual of,	H. R. M. Sandis49, 349, 528, 647
by Cornelius Godfrey Coakley	
Diseases of Women, A Text-Book of, by Bar-	Reference Handbook for Nurses, by Amanda
ton Cooke Hirst 790	K. Beck
	Saunders' Medical Hand Atlas, by Dr. O.
Essentials of the Practice of Medicine, by	Haab
William R. Williams	Text-Book of Clinical Diagnosis, by L.
Eye, Ear, Nose and Throat Nursing, by A. Edward Davis	Napoleon Boston
Edward Davis	Text-Book of Legal Medicine, by F. Winthrop
Gall-Stones and Their Surgical Treatment,	Draper 170
by G. A. Moynihan227, 348	Text-Book of Medical Chemistry and Tox-
	icology, by James W. Holland 347
Harrington's Practical Hygiene, by Charles	Text-Book of Obstetrics, by Adam H. Wright,
Harrington 411	350, 411
Internal Medicine, The Diagnosis of, by Glen-	Text-Book of Physiology, by Isaac Watt 229
worth Reeve Butler 698	Text-Book on the Practice of Gynecology, by W. Easterly Ashtou
Lea's Series of Medical Epitomes, by Victor	The American Year-Book of Medicine and
C. Pedersen 413	Surgery, by Geo. M. Gould 525
Light Energy, by Margaret A. Cleaves 230	The After Treatment of Operations, by P.
	Lockhart Mummery 232
Malaria, Influenza and Dengue, by J. Manna-	The Eye, Mind and Energy Natter, by
berg 526	Chalmers Prentice 290
Malformation of the Genital Organs of	The Ophthalmic Year-Book, by Edward
Woman, by Chas. Debierre	Jackson
Manual of Chemistry, by William Simon 608	The Physician's Visiting List
Manual of Diseases of the Eye, by Charles II. May	The Pharmacopeia of the United States of
Manual of Midwifery for Students and Prac-	America
titioners, by Henry Jellett 648	Scudder
Manual of Personal Hygiene, by American	The Surgery of the Diseases of the Appendix
Authors	Vermiformis and their Complications, by
Mechanical Vibration and Its Therapeutic	William Henry Battle 231
Application, by M. L. H. Arnold Snow 353	The Treatment of Syphilis, by F. J. Lambkin 233
Modern Clinical Medicine, Infectious Diseases,	The Vermiform Appendix and Its Diseases,
by J. C. Wilson 529	by Howard A. Kelly 347
Morrow on Social Diseases, by Prince A.	Urine, Examination of the, by G. A. de
Morrow 353	Santos Saxe

ARTICLES.

Abnormal Refraction and Eye Strain	Address to the Graduating Class in the Faculty of Medicine in McGill University, Montreal 612 Address, President's 669 Albumin; Tests for 88 Albumin; Clifford, Address at St. Louis 212
------------------------------------	--

PAGE	PAGE
Alcohol and Alcoholic Fluids, The Effect, etc. 109	Diphtheric Paralysis, Antitoxin in 90
Alcohol in Typhoid Fever 22	Diseases of the far 327
American Disease, The, an Interpretation 427	Diseases of the Eye, The Combined Treat-
Ammonia Burns of the Eye, The 651	ment in 195
Anesthesia, Urine after 505 .	Delirium Tremens, Cold Affinsion in 167
Analgesia in Obstetrics 90	Dysmenorrhes 92
Anterior Metatarsalgia, Observations upon,	Dilator, Bossi's
with notes in seven cases	Ton Discourage to
Antistreptococcic Serum, The Action of 172 Antistreptococcic Serum, The Administration	Ear, Diseases of the 327 Ear, The Significance of a Discharge from the 94
of 217	Eclampsia, Thyroid Extract in
Antitoxin in Diphtheric Paralysis 50	Enteric Fever, Prognostic Value of Diazo
Appendicitis, Some conclusions based on	Reaction in
Four Hundred Operations 416	Epilepsy, Gluttony as a Cause of Symptomatic 270
Appendicitis, The Treatment of 321	Epithelioma of Soft Palate, Tonsil and both
Appendix, The Function of the Cecum and 26	Alveoli 323
Apoplexy, The Prevention of 493	Epithelioma, X-Ray Cure 17
Asepsis in the Rotunda Hospital, Dublin 201	Erysipelas, A Case of Facial, Complicated
Aseptic Operating 218	with Labor 255
Aspirin, The Therapeutics of	Etiology of Disease, The Relation which
Baldness, The Treatment of	Hypertrophy of the Various Tousils of
Blood Changes in Pneumenia	Waldeyer's Ring Bears in the
Bright's Disease and Salt 323	Excision of the Wrist
Bronchus, Report of a Case of Obstruction of	Eye Strain, Brain Strain 325
the Main, by a shoe button	Eye, Combined Treatment in Diseases of the 191
Bossi's Dilator	Eychall, The Removal of Foreign Bodies
British Medical Association 693	from the, etc
Cancer, Visceral Hypoplasia and 500	Eye Diseasen, Hot and Cold Water in 93
Carcinoma and Rontgen Rays, Inoperable. 549	Fezema54
Cardiae Failure, during Chloroform Anes-	Examinations, Results of Recent 467
thesia	Exophthalmic Goitre, Medical Treatment of, 355
Cecum and Appendix, The Function of 26	Exophthalmic Goitre, Thyroidectomy in
Cauterization of the Lower Turbinate, Ulti-	
mate Results of	Facial Engipelas Complicated with Labor 255
Cervical Canal, Expid Dilatation of the 237	Fatal Precipitate Labor
Cholecystitis, Acute, in the Puerperium 571 Cholelithiasis 570	Filariasis in Man Cured by Removal of the
Chorea Minor, A Study of	Adult Worms in an operation for Lymph Scrotum
Chorion, Cystic Degeneration of the Villi of . 295	Floating Kidney
Chronie Posterior Urethritis, Treatment 103	Furuncle of the Canal Otitis Externa Circum-
Clay Poultices, Medical Value of 272	scripta 155
Climatology of Muskoka, The 1	
Clinical Examination of the Urine 322	Gluttony as a cause of Symptomatic Epilepsy 270
Chloroform Anesthesia, Cardiac Failure	Goitre, The Medical Treatment of Exoph-
during 172	thalmic355
Coffee Amblyopia 509	Goitre, The Surgical Treatment of Exoph-
Colon, Resection of the Splenic Flexure of the	thalmic
Corneal Ulcers, Quinine in the Treatment of. 326	Goitre, Thyreidectomy in Exophthalmic 23 Gonorrheal Infections in Children
Consumptives, Treatment of, at Home 53	Gonorrheal Infections in Children
Convergent Strabismus	Appendages, Spontaneous Recovery 22
Cornea, Hot Water Directly Applied to 33	Gonorrheal Salpingitis, Recovery after Re-
Correspondence	moval of the Tubes
Cough and Loss of Weight due to Worms 632	Gunshot Wounds and the Resection of Knee
Croup, due to Staphylococcus, Three recent	Bones Nailed Together 134
cases of	Gynecology, Medical 95
Cyclic Vomiting, due to Eye Strain 631	
Cystic Degeneration of the Viili of the	Hands, Signifization of the 99
Chorion, etc	Headache, Nasal Disease as a cause of 52
Diazo Reaction in Tuberculesis	Heart, Insufficiency of the, in Nitral Affections 503
Diphtheric Antitoxin, The Potency Period of 628	Hemorrhagic Pancreatitis 175
Diphtheria Antitoxin, Some Observations	Hemorrhoids, Protruding, Irritable 173
on the Use of	Hemorrhagic Pleurisies, The Diagnostic
Diphtheria, Nasal	Value of SIS

PAGE	PAGE
Hydrorrhea, Nasal	Pathogenesis and Treatment of Chronic Ar-
Hymen, New Method of Accurately Exam-	ticular Rheumatism S8
ining, A 532	Pelvimeter, Some Lessons to be Derived
Induction of Labor 507	from the Use of
Influenza	Personals46, 107, 165, 225, 284, 344, 407, 472, 520, 585, 648, 692
Immunity	Perforation in Typhoid Fever 505
Inquiries and Replies 258	Phthisis, Triumph of an Internal Disinfectant 111
Insomnia, How to Overcome	Phototherapy
Involution and Subinvolution of the Uterus, 129	Physician, The Bible and the
Ischuria, Etiology of, in Retroflexion of the	Physiologic Action of Dionin, The
Gravid Uterus 91	Pleurisics, The Diagnostic Value of Hemor-
	rhagic 018
Kidney Decapsulation for Nephritis 632	Position of the Kidney after Nephropeny 25
Kidney, "Floating" 28	Pneumonia, Blood Changes in 216
Kidney, Position of, After Nephropexy 25	Potency Period of Diphtheria Antitoxin, The 629
Kidney, The Circumstances and Treatment of Movable	Fregnancy, Pyelitis in
or movable	Pregnancy, Toxemia of
Labor, A Case of Facial Erysipelas compli-	President's Address 536
cased with: Treatment with Antistrepto-	Prevention of Apoplexy, The 493
ccccic Serum—Recovery	Prostate, The Radical Cure of Senile Hyper-
Labor, Clinical Experience with Occipito-	trophy of the
Posterior 59	Proprietary Remedies, The Relation of the
Labor, Obstructed	Physician to 21
Labor, The Induction of 507	Puerperal Fever, The Serum Treatment of 149
Labor, Precipitate, Fatal 573	Puerperal Fever
Lymphangioma, Cavernosum with Chylor-	Puerperal Infections, An Investigation into
rhea 112	the Causation of
M. Jimi Diamana Buomanal Pausa 900	Puerperium, Acute Cholecystitis in the 571
Medical Pioneers, Puerperal Fever 206	uerperium, Some Lessons to be Derived
Medical Profession in Nova Scotia, Growth	from the Use of the Pelvimeter During the 125 Pulmonary Tuberculosis, Home Treatment of 250
and Organization of the	Pulmonary Tuberculosis, frome freatment of 250
Mental and Physical Care of Improperly Cared-for Children, the duty of the Pro-	Quinine in the Treatment of Corneal Ulcers . 326
fession and State	Quinquad's Sign of Alcoholism 53
	Radium: Its Value in Medicine 549
Movable Kidney, Circumstances and Treatment of	Rapid Dilatation of the Cervical Canal 570
Muskoka, The Climatology of	Removal of Foreign Bodies from the Eyeball,
Menorrhagia and Hemoptysis, The Treatment	The 154
of 572	Removal of the Uterus
Myopia	Rest as Curative Agent 219
	Rheumatism, Pathogenesis and Treatment of
Nasal Disease as a Cause of Headache 329	Chronic Articular SS
Nasai Diphtheria	Rontgen Rays, Inoperable Carcinoma and 531
Nasal Hydrorrhea	Rontgen Rays, The Use of, in Medical Prac-
Nephritis, Kidney Decapsulation for 632	tice 320
Obstructed Labor	Salt and Bright's Disease
Obstetries, Analgesia in	Secretion, Internal 660
Occipito-Posterior Labor, Clinical Experience	Septum, Almest Complete Absence of the
with	Interior Audeular, with Infective Endo-
Ocular Affections of Nasal Origin, A Study	carditis 502
01	Serum Treatment of Puerperal Fever, The 149
Operations, The After-treatment of 232	Sciatica, Treatment of
Operations for Ventro-suspension of the	Small-pox, Symptomatology and Diagnosis
Uterus 475	of Thirty-three Cases 302
Ophthalmia, Acute Contagious, Itational and	Small-pox and Its Treatment 561
Moist Cold Applications in 511	Staphylococcic Infection of the Tonsil 564
Otomycosis Aspergillina, New Method of	Stomach, Surgery of the, from the Stand-
Treating	point of the Clinician
Otology, Obligatory Teaching of 500	Surgery, Substitute for Rubber Gloves in 25
Oxygen, Use of, in Association with Chloro-	Surgical Treatment of Exophthalmic Goitre,
form and Ether 310	The S61
	Surgical Treatment of Facial l'aralysis 80
Pancreatitis, Hemorrhagic	Symptomatology and Diagnosis of Small-pox 502
Paralysis, The Surgical Treatment of Facial. 80	Syphilis, The Origin of 278 Strabismus, Convergent 24
Details Transferent of Francisco of the 347	Straumus, Convergent

PAGE	PAGE
Tests for Albumin	Tuberculosis, Home Treatment of Pulmonary Cases in Practice 250 Tuberculosis, Opsonic Power in 560 Typhoid Fever, Alcohol in 173 Typhoid Fever, Galloping 57 Typhoid Fever, Perforation in 505 Urethritis, Chronic Posterior Treatment 108
nant Diseases, of the	Urine After Anesthesia 505
Tonsil, An Instance of Staphylococcic Infection of the	Urine, Acid Intoxication of
Torticollis following the Removal of Adenoids 331	Urine Examination 215
Toxemia of Pregnancy, The 244 Treatment of Appendicitis, The 321 Treatment of Baldness, The 626	Uierine Appendages, Gonorrheal Inflamma- tion of the
Treatment of Bright's Disease, The	Ventro-Suspension of the 475
Treatment of Consumptionat Home, The 62	Uterine Hemorrhages, and their Treatment. 149
Treatment of Fracture of the Patella 147	Uterus, Involution and Subinvolution of the. 129
Treatment of Lupus by the Non-Specialist 111	Uterus, The Etiology of Ischuria in Retro-
Treatment of Menorrhagia by Inhalation of Nitrite of Amyl	flexion of the Gravid
Tuberculosis, Congenital	
Tuberculous Cystitis 55	Venereal Warts
Tuberculosis, Diazo-Reaction in	Veronal Poisoning, A Fatal Case of 681 Visceral Hypoplasia and Cancer 569
Constitutional Treatment of 489	Wrist Excision of the

The Canadian Practitioner and Review.

VOL. XXX.

TORONTO, JANUARY, 1905.

NO. 1.

Original Communications.

THE CLIMATOLOGY OF MUSKOKA, ONTARIO, CANADA.*

By J. H. ELLIOTT, M.B., GRAVENHURST, CANADA, Muskoka Cottage Sanatorium.

The district of Muskoka lies on the eastern shores of the Georgian Bay, between the counties of Simcoe, Ontario and Victoria on the south, and the district of Parry Sound on the north; its southern portion is 100 miles distant from Toronto. The 45th parallel of latitude passes through it, and its longitude is about 80 deg. W. It lies practically due north of Pittsburg. Pa., and Charleston, S.C., and is in the latitude of St. Paul and Minneapolis and the northern portion of the Yellowstone Park, and is about one degree higher in latitude than the Adiron-It has been well named the "Highlands of Ontario." The elevation is very moderate, varying from 600 to 1,400 feet. The shores of Georgian Bay are 580 feet above sca level, the Muskoka Lakes (Muskoka, Rosseau and Joseph), 750 feet, Huntsville and the Lake of Bays about 1,000 feet, while the north east corner reaches 1,400 feet. This part is only a few miles distant from the Algonquin National Park, a reservation of over a million acres from which radiate three great lake and river systems of the Province-the French, Magnetawan and Muskoka Rivers to the west, the Petawa and Ottawa to the east, and the Trent system to the south. The stations of the Canada Atlantic Railway in this portion of the Park have an elevation of 1,300 to 1,600 feet.

^{*}Recal before the American Climatological Association, Philadelphia, June 4th, 1904.

TABLE OF ELEVATIONS ALONG LINE OF GRAND TRUNK RAILWAY IN MUSKOKA.

Miles from	•	Elevation.
100.1	Severn Station	730
100.3	Severn River, water 697; rail	724
104.0	Kasheshe-bogamog River, water, 710; rail	719
105.9	Kilworthy Station	755
109.4	Summit	851
111.4	Gravenhurst Station	818
112.4	Muskoka Wharf Station	749
	Muskoka Lake, water (Aug. 21st, 1900)	745
117.8	Summit, ground, 3,450 ft. south, 916; rail	910
120.5	South Branch, Muskoka River, water, 745;	
	bed, 730; rail	S06
121.3	North Branch, Muskoka River, water, 778;	
	bed, 776; rail	S21
121.6	Bracebridge Station	817
126.3	Falkenburg Station	957
128.0	Summit, ground, 1,069; rail	1,058
131.8	Depression, ground 983; rail	998
135.1	Utterson Station	1,041
135.8	Summit, ground, 1,071; rail	1,057
138.4	Allensville, road crossing	970
139.9	Caswell Lake, water, 1,001; rail	1,011
141.0	Summit, ground, 500 ft. north, 1,066; rail	1,049
145.9	Huntsville Station	957
146.1	Vernon Lake, water	936
146.5	Vernon River, water, 936; rail	972
147.8	Summit, ground, 1,012; rail	1,001
150.2	East River, water, 938; rail	961
155.4	Novar Station	1,075

To the hunter and angler the Muskoka Lakes district offers a great variety. Deer, bear, fox, rabbit and partridge are numerous, while the fishing grounds for black bass, maskinonge, pickerel, salmon trout and speckled trout cannot be surpassed. It is estimated that each year over 12,000 deer are killed during the open season in November, but owing to the protection given them and the excellent cover and feeding ground, their numbers continue to increase rather than decrease.

Writers have derived the word Muskoka from various sources. The word is of Indian origin. Musque-doh, "clear sky land," is the signification usually given to it, and this seems a very plausible one and has been generally accepted. Others trace it to Mus-quo-tah, signifying "red ground," referring to the rusty color of the soil and rocks in places, but there is little doubt that the district derives its name from the Mississauga chief Muskoka, or Mesqua-Ukee (not-easily-turned-back-in-the day-of-battle), who fought with the British in the war of 1812 and was given a medal. His tribe lived along the north shore of Lake Ontario and east of Lake Simcoe, and though Muskoka still possesses deer and game in abundance, it must then have been a hunter's paradisc. The south branch of the Muskoka River was the patrimony of this warrior and hunter. Little could he have thought as he yearly sought sport and recreation

in these northern wilds, that a century later it would be peopled each summer by thousands seeking rest and health during their summer vacation.

Muskoka is an unorganized district, having no municipal government, but being under the direct control of the Ontario Legislature, owing to its being so sparsely settled. In it are twenty-one townships, and it covers an area, roughly, of 1,500 square miles. The population is about 21,000.

The rock formation throughout Muskoka is the Laurentian, a continuation of that which extends throughout northern Ontario and Quebec. It is not mountainous, but a succession of jutting boulders and huge hog-backs covered with vegetation, except where denuded by forest fires. Scattered through it are hundreds of pretty lakes, all of which are dotted with islands. Only rarely does the soil come to the water's edge; either rocks or sand beaches form the shore line everywhere, while the islands for the most part are huge masses of rock rising boldly out of the water, verdure clad. In the three lakes, Muskoka (22 miles long), Rosseau and Joseph (each 16 miles long), are over 400 islands.

Pine and hemlock abound everywhere. The principal deciduous trees are the sugar maple, beech, basswood (Linden), and The silver birch and aspen are seen everywhere the birches. blending their pale green with the deeper green of the larger The flora of the district is a very rich one. The Alpine flora of northern Canada begins here, while all the plants of Ontario, except the southernmost, find a home. Within a radius of a mile of the Sanatorium at Gravenhurst over 300 species of flowering plants are to be found, while the lichens, mosses and ferns grow in abundance and most luxuriantly; the great Osmundas are almost tropical in their growth, very fine specimens of club mosses are found everywhere, and pitcher plants and various orchids, particularly Habenaria, Cypripedium and Pogonia, reveal themselves, not to the hurrying tourist, but to those who know their favorite haunts.

The summers are warm, with as a rule, cool nights. Only occasionally is there a night which is uncomfortably warm. The mean daily maximum for June, July and August is 77.4 and mean daily minimum 53.3. During September it becomes noticeably cooler, the mean daily maximum being 69.3 and the mean daily minimum 48.0. Late September and early October are delightful with the gorgeous coloring of the maples and oaks, mixed with the yellows and browns of the beeches, aspens and birches, with the green background of pines and hemlocks or the dull reds and browns of the granite rocks or the grey and green of the lichens and mosses which flourish on them. No pen can

draw a picture of the beauty of the lakes and islands during

the changes of autumn.

Snow appears in flurries during November, and about December 1st the ground is covered, remaining so till March. Winter thaws are unusual; once the snow comes, it remains, and sleighing once established remains good till spring. Rarely is there the succession of snow and rain so frequent in the region of Lakes Ontario and Erie. The lakes freeze over late in November or early in December and do not open again until April. The thickness of ice will vary from 16 to 24 or even 30 inches. Though the air in winter is cold, it is comparatively dry and is not penetrating, and sitting out of doors or driving is made very comfortable by means of furs and rugs. The mean temperature for the four winter months, December to March, is 19.1 and the mean relative humidity is 81, the air



The Muskoka Lakes, with their numerous islands.

holding only about 9 grain of moisture per cubic foot or onethird the moisture of air at 60 deg. which has a relative humidity of only 50. The mean daily maximum for the four months is 26 deg. and mean daily minimum 9.5 deg. Mean monthly maximum 45.2 deg. Mean monthly minimum —20.3 deg. Mean yearly minimum —31.7 deg.

As a rule the wind drops when the mercury reaches zero or a few points below, and with a temperature of —10 deg. or —20 deg. the atmosphere is still and clear. Some of the most perfect days are when the temperature is below this: not a cloud in the sky, the snow crisp and sparkling in the sunlight, and the smoke from fires rising straight up into the air. The total annual snowfall is 99.4 inches, there being an average of 18 to 24 inches usually on the ground.

April and May, which are the spring months, have a mean temperature of 47.9 deg., a mean daily maximum of 57.9 deg., a mean daily minimum of 36 deg., and a mean relative humidity of 60. Thus the climate is not humid, but moderately dry. The rainfall for the two months is 4.08 inches, April having a mean of seven days on which rain falls and May having eleven. Mean snowfall for April 2.2 inches, May 0.2.

The first of the wild flowers appear in March or early April, before the snow has disappeared, and by the first of May the woods are carpeted with them—hepatica, claytonia trillium,



Echo Rock, Lake Joseph. showing the typical rock formation.

dicentra, violets, tiarella, and hosts of others; while later the secluded places and sphagnum woods abound in laurel andromeda and many others of the heaths. The rocks, too, are covered with the bloom of blueberries, huckle-berries, strawberries and wild cherries, which later bear a profusion of fruit.

The following table of temperature, rainfall, etc., at Gravenhurst, Lat. 44.54 N., Long. 79.20 W. (770 feet), is, with the exception of relative humidity, from observations by T. M. Robinson, Esq., covering a period of thirty-two years. Instruments used, those of the Dominion Meteorological Service. The relative humidity is from personal observations, covering three years. Negretti and Zamb a thermometers Sunshine from recorder of the "burning" type over a period of two years:

TEMPERATURE, RAINFALL, ETC., AT GRAVENHURST, ONT.

Year.	25.74 19.6 19.6 25.74 888 181 181 184
Dec.	21.7 2.4.4 30.4 4.4.4 16.0 16.0 17.7 18.7 19.7 10.7 10.7 10.7 10.7 10.7 10.7 10.7 10
. Nov.	23.7 25.7 27.8 27.8 27.8 1.84 1.84 1.84 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Oct.	46.5 74.1 22.0 27.0 37.9 20.1 10 10 10 16 16 16 16 16 16 16
Sept.	27.7 83.3 80.8 80.8 81.3 81.3 81.3 81.3 76
Aug.	65.3 899.4 89.4 85.6 8.3 99 11 76
July.	68 68 68 68 68 68 68 68
June.	63.7 34.2 34.2 51.9 51.9 51.0 51.0 51.0 51.0 51.0 51.0 51.0 51.0
May.	23.08 20.08 20.09 20.00
April.	20.2 20.2 20.2 20.2 20.2 20.2 20.2 20.2
Mar.	24.7 49.9 7.20.1 7.20.1 7.20.1 1.30 8.30 1.60 1.60 1.60 1.60 1.60 1.60 1.60 1.6
Feb.	7.43.2 4.3.2 7.5.6 9.0.6 1.0.6 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1
Jan.	15.5 40.8 40.8 24.2 5.8 5.8 18.4 1.4 1.4 1.1 1.1 1.4 1.0 20 87
	Mosn temperature. Maximum Minimum Mean daily minimum Mean daily minimum Mean daily in inches. Rainfall, in inches. Rainfall, in inches Snow, number of days. Number of clear days. Number of clear days. Number of clear days. Number of clear days.

. o. 510

м.w. 103

۰. 166

.s. ≰.

s. 158

s. e. 148

∴ **3**

χ. χ. 62

м. 126

PREVAILING WINDS DURING THE YEAR. FROM TRI-DAILY OBSERVATIONS.

MEAN PROPORTION OF BRIGHT SUNSHINE, GRAVENHURST.

Two Years' Observations.

	190	-2	1903		
•	Mean Proportion.	Days Completely Clouded.	Mean Proportion.	Days Completely Clouded,	
May	.46	1	.68	2	
June	.46	0	.50	0	
July	.54	1	.58	0	
August	.57	O	.50	2	
September	.35	8	.43	1	
October	.40	8 5	.45	4	
November	.39	10	.36	7	
December	.33	10	.29	13	
January	.25	12	.25	13	
February	.28	15	. 45	6	
March	.34	9	.35	3	
April	.53	3	.41	3	

Mean of two years' sunshine—1902, .40; 1903, .44. Days each year completely clouded—1902, 74; 1903, 60.

The skies in Muskoka are wonderfully clear, there being a remarkable freedom from haze and dust. The freedom from dust is well evidenced in the winter, the snow retaining its whiteness and purity through the spring until it has quite disappeared. Never does one see the snowbanks during mild weather a mass of dirt and muddy snow. There is a hazy aspect over the skies, particularly about the horizon during the ideal Indian summer weather which appears during the autumn.

Lumbering is the chief industry, and as there is comparatively little land under cultivation, there is a minimum of dust.

Public highways with the exception of one or two leading roads, are little used, and this factor is unimportant. The purity of the atmosphere is well attested by the fact that suppuration of wounds is very rare, healing by first intention being the rule.

Fogs occur but seldom, varying from four to ten in each year, and these always dispersing when the sun comes out.

I extract the following from the 1898 "Transactions of the Astronomical and Physical Society of Toronto": "Mr. John A. Paterson, who had just returned from a holiday trip, spoke enthusiastically of the serenity of the skies in the Muskoka district. Last August I visited a pleasantly sequestered nook in the Georgian Bay, bearing the mellifluous name of Honey Harbor, and there the evening sky was to me a revelation. The transparency of the air is such that the ordinary eye is as good as a telescope of moderate power. Here we do not, and cannot, see the glories of the heavens as they look down on us, but in Muskoka, the bosom of old night seems on

fire and sparkles with as many colored glories as the hilt of King Arthur's sword Excalibur?

The following, also bearing on the clear atmosphere of Muskoka, I extract from a paper by the President of the same

Astronomical Society:

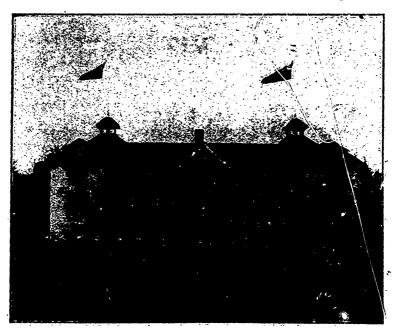
"I have often wondere I why the attention of tourists is not called to the ideal conditions which exist in Muskoka and our northern districts for the observation of the sun, moon and stars. Having spent portions of seven summers in that truly delightful region, and having availed myself of nearly every



Sunset at Bala Falls, the outlet of the Muskoka Lakes.

opportunity that was offered, I have over and over again been impressed by the signal advantages everywhere present for making astronomical observations. In no other place has it been my fortune to see the sun with so white a disc, or the moon with such a silvery sheen, or the stars of such brilliance. By day the skies are as blue as the skies of Italy, and by night as black as those of the tropics. Against the Ethiopian hue of

the night sky, celestial objects stand out clear-cut and with marvellous beauty. The atmosphere is pellucid. Setting stars can be followed down to the very horizon, and I have often seen Capella, that lovely sun in Auriga, skirting through the branches or the distant tree-tops along the north-western skyline. In other less favorable localities, stars are commonly bedimmed by, or lost in, the low hanging mist, dust and haze, which either blur or effectually extinguish them is fore they set. During the past summer I was surprised at the wealth of detail revealed day after day upon the sun, especially where there were spots and faculæ, and night after night upon the



Muskoka Free Hospital for Consumptives: Administration Building. Established-1901, by the National Sanitarium Association of Canada; maintained by voluntary contributions; 75 beds.

moon, and in the interesting planetary systems of Jupiter and Saturn. I quite agree with the celebrated American astronomer who spends his holidays in Muskoka, that in our northern districts a first-class field glass will usually do the work of a small but excellent telescope used almost anywhere farther south. Then, in addition to the peculiar astronomical, observational advantages, there are frequent displays of aurora and atmospheric effects of unrivalled variety and beauty. The latter include gorgeous sunsets, mock suns. solar halos and rays.

Not infrequently the sun goes down in skies which beggar the powers of description, fleeked as they are by fleecy clouds of opalescent tints, contrasting with rich crimsons, lakes, carmines and other brilliant colors, thrown upon golden-green backgrounds, and shading through all the tints of blue, from the faintest hues in the west to the deepest tones overhead, and to

almost black purples in the east."

The water in Muskoka is particularly pure. The rivers and lakes show in the sunlight a mass of blue and silver, but looking into their depths, especially in the rivers, they possess a brownish aspect. Throughout northern Ontario the rivers are dark, due to the vegetable matter in solution taken up from their sources and along their beds, and remaining unprecipitated owing to the softness of the water and the absence of metallic salts. Rushing over rocks and boulders, and passing through a sparsely settled country with little possibility of contamination the waters are free from impurities. They are, too, peculiarly free of any degree of hardness owing to the absence of lime in the Laurentian rock, which is the only system in the district. Even the well water is comparatively soft. The following table shows an analysis of the water of Lake Muskoka, made by Dr. J. A. Amyot, Provincial Bacteriologist. I have also tabulated analyses of well water taken from a 12-foot well in the woods about eighteen feet from the shore of the lake, and that of a seepage spring passing through meadow and wooded land. These three sources form the water supply of the Muskoka Cottage Sanatorium and the Muskoka Free Hospital for Consumptives, Gravenhurst.

		1	2	3
	1	Vell Water M. C. S.	Lake Water.	Free Hospital Supply.
Color		None	Straw yellow	Yellower than No. 2
Odor (cold)		None	None	None
Odor (after heating)		None	None	None
Albuminoid ammonia		085	.19	.095
Free ammonia	Parts	.055	.04	.085
Nitrogen, as nitrites and nitrates		.220	.08	.345
Oxygen consumed	per million.	[4.00	13.20	11.40
Chlorine	1111111011.	4.00	4.00	4.00
Total hardness		J 13.00	5.00	8.00
				_

No iron was found in residue from 200 c.c. water evaporated in dryness.

A bacteriological examination of three samples taken from Gull Lake showed no colon bacilli, and of bacteria of all kinds 33, 34 and 23 colonies per c.c. respectively.

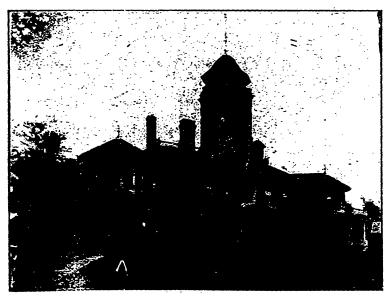
The town of Gravenhurst (pop. 2,500) lies between these

two lakes, touching both of them.

One very noticeable feature in Muskoka is that in the hottest summer weather it is perfectly safe to go about with the

head bare. What there is in the atmosphere to account for this I cannot say, but the average summer resident goes about hatless throughout the season, and sunstroke is unknown.

Sufferers from hay fever have, in Muskoka, immunity from their distressing attacks, and each year an increasing number of these patients make the district their objective point during the autumn. It is unusual-to see a case in which the symptoms do not disappear within twenty-four hours of arrival, while if the date of the attack is anticipated, none of the symptoms develop. Asthma, too, is markedly relieved by residence in Muskoka. I have seen many cases of long standing materially



Muskoka Cottage Sanatorium: Administration Building. Established, 1896, by the National Soutarium Association of Canada. The first in Canada for the treatment of pulmonary tuberculosis; 70 beds.

improved, with an entire cessation of paroxysms, without medication. Pneumonia is comparatively rare, many physicians rarely seeing more than one or two cases in a year. In over 1,000 cases of pulmonary tuberculosis under personal observation: I have never the lobar pneumonia develop. Simple aremias are quickly benefited by a residence in Muskoka, with the out-of-door life and the acquirement of what is commonly known as the Muskoka apperite.

The wonderful variety of scenery, of rock, lake, river and forest, with the adaptability of the surroundings to meet the

varying moods of the neurasthenic, make it a splendid place for such cases.

For many years the district has been growing in favor as suitable for the treatment of pulmonary tuberculosis. At first, patients were sent only for the summer months, but since the establishment of the two sanatoria of the National Sanitarium Association of Canada, the experience of Trudeau in the Adirondacks has been found to hold here also-that in winter cases do better even than in summer, and its value as a place of winter residence is becoming more recognized.* The severe winters are enjoyed by the robust patient and those whose recuperative powers are good, but render it unsuitable for the advanced case with anemia and poor capillary circulation, who is weak and cannot stand the cold. But it is really surprising to see how many come to us who say it will be impossible for them to sit out during the winter, and who, in a very short time are enquiring whether there will be any objection to sleeping with the temperature of the bedroom 30° Fah, instead of 45°.

The presence of so much water in the lakes and rivers has been urged as an objection to its being a suitable climate for pulmonary invalids, but I am each year more convinced of the value of time spent on the lake in boating, canoeing or sailing, both to those who are strong enough to indulge in the exercise themselves and to those unable to take active exercise, who must perforce leave the management of their craft to others.

The death rate for 1902 was 11.2 per 1,000. The rate is increased by the accidents incident to lumbering, saw mills, etc., while the influx of thousands during the summer season also

increases the rate.

The islands and shores of the Muskoka Lakes are dotted with hundreds of cottages occupied during the summer months by visitors from all parts of the United States and Canada, from an unpretentious camp or shack to the Club house or the villa which has cost many thousands. Canoes, yachts, dingies and launches ply the waters everywhere while the large boats of the Muskoka Navigation Company make all points on the lakes accessible by their twice daily trips. Muskoka Wharf at Gravenhurst is the distributing point for these lakes.

The Like of Bays District is reached from Huntsville. Though more recently opened it is rapidly building up with camps and cottages. It is somewhat higher than the Muskoka

Lakes, but otherwise similar.

The Georgian Bay region of Muskoka with its 20,000 islands is reached by boat from Midland or Penetanguishene, but is accessible only during the summer months.

^{*}Fide Editorial, Canada Lancet, May, 1901.

The cost of living is everywhere moderate, and the tastes of all are catered to, from the modest farm house at \$3.00 to \$4.00 per week to the better equipped hotel at \$8.00 to \$12.00, while the "Royal Muskoka" in Lake Rosseau affords the comforts and luxuries of the most modern summer resort.

Muskoka is reached by the trains of the Grand Trunk Railway, which are run solid from Buffalo and Toronto to Muskoka Wharf and Huntsville.

To sum up—Muskoka is a sparsely settled district, readily accessible, abounding in the beauties of nature. The winters are cold and free from rain, fog and dampness; the spring and autumn often rainy but beautiful; the summer ideal in warm days and cool (not cold) nights. Game and fish abundant. The cost of living very moderate. No hay fever, no malaria. No dust. A clear atmosphere. Highly suitable for anemic, neurasthenic cases, for the weary business man seeking relaxation, recreation and sport, for the asthmatic, and practically all pulmonary invalids.

SOME OBSERVATIONS ON THE USE OF DIPHTHERIA ANTITOXIN.

By F. B. SHUTTLEWORTH, PHAR.D., F.C.S., City Bacteriologist, Toronto.

A summary of the results of the use of diphtheria antitoxin in the Riverdale Hospital was presented, in 1900, at the annual meeting of the Association of Executive Health Officers of Ontario. This covered the period from 1894, when the first experiments were made, until the close of 1898, and comprised 157 cases with a mortality of 21.6 per cent., and an average hospital term of 25.4 days for the non-fatal cases. The average hospital mortality for the period was 14.3 per cent. and the term was 23.5 days. The hospital antitoxin cases represented the ordinary run of patients, and the remaining 43 cases were those to whom the remedy had been administered by city physicians before or immediately after the admission of the patients.

These results were so exceedingly discouraging that hospital experiments were for the time abandoned, and in 1899 only 10 cases were treated, either by the resident physician or by others. Two of the cases proved fatal, showing a mortality of 20.0 per cent. against an average hospital mortality of 12.4 per

In 1900 there was some revival of interest in antitoxin. Sixty-two patients were treated in hospital, and there were, in addition, 20 others to whom it had been given before admission. Of these 82 cases 20.7 per cent. were fatal. The ordinary hospital mortality for the year was 14.8 per cent.

The following year there were 119 hespital and 35 outside cases of whom 17.5 per cent. died, the annual hospital rate being

13.4 per cent.

In 1902 there were only 105 antitoxin cases, and most of them had been treated by their own physicians before admission or shortly after arrival in hospital. The mortality was for the first time under the hospital rate, the figures being respectively 14.3 and 15.6 per cent.

The total number of antitoxin cases since 1894, up to the end of 1902 is 508, with 95 deaths or 18.7 per cent. The average hospital mortality for diphtheria for the same period is 14.0, showing a difference of 4.7 per cent. against antitoxin. This would, of course, be much increased if the antitoxin cases were not included in the hospital totals.

In order to account for this disappointing result it might be argued that in the cases treated with antitoxin in hospital the disease is generally too far advanced. Some light may be thrown on this assumption by separating the hospital cases from those treated by city physicians, as in the latter the

injection is often made before the patient is admitted, and thus, as a rule, the treatment commences somewhat earlier than in the hospital cases. Of the total of 508 there were 301 hospital cases with a mortality of 18.9, and 207 city cases with a mortality of 18.3 per cent., figures which are practically identical and which show that time has not been a factor of much

importance.

Another way of attempting to explain the antitoxin position is that of assuming that the cases to whom serum is administered are generally of a more serious kind than others. This may be to some extent true with regard to hospital cases treated by city physicians, but it does not hold good generally as to those who came under the resident physician. The first cases were chosen purely for experimental purposes, so that the various types of diphtheria might be represented. In the second series of experiments comprising 100 cases, there was absolutely no selection, other than that every alternate patient between one and ten years of age was treated with antitoxin immediately after admission to hospital. In 1900 there were a few severe cases to whom the remedy was given in the hope that it might do some good, and also demonstrate its antitoxic power in the undoubted presence of toxin. In the balance of the hospital cases the serum was used at the request of the friends of the patient or of the attending physician. Taken altogether, the antitoxin cases might be accepted as being a shade more severe than the usual run, but by no means as much so as indicated by the excess of mortality.

A very fair estimate of severity may be made by the indications furnished by the site of the membrane. Pharyngeal cases are, of course, the most common, usually comprising from 50 to 60 per cent. (60 per cent. in 1900-1). Fifty-three per cent. of the antitoxin cases were of this character—a trifle under the average. Naso-pharyngeal cases are nearly always severe and make up from 20 to 30 per cent. of the patients admitted (28) per cent. in 1900-1) with a high mortality (35.0 per cent. in 1900-1). The proportion of antitoxin cases (27 per cent.) was fairly within the limits. Of laryngeal cases there were only 9 per cent. against 10 to 15. Altogether, as judged in this way, the antitoxin cases were fairly representative of average

admissions.

The indisputable fact remains that, judged from the standpoint of case mortality, the results of the use of antitoxin in the Isolation Hospital, from 1894 to 1902 inclusive, have been decidedly unfavorable, both when estimated for each individual year, with the exception of 1902, and also collectively, as to the total result.

Another question to determine is that, of the influence of

antitoxin in the duration of the disease. In order to put this in a fair light it will be necessary to differentiate between duration of disease and duration of infection. It is here that there appears some evidence of the benefit of antitoxin, though the writer is unable to reduce it to a statistical form. The matron and nurses of the Hospital, after considerable experience, are of the opinion that antitoxin cases are "more easily nursed" than others; that is, symptoms are less severe and less lasting,

more especially as to persistence of membrane.

The duration of the hospital term is, practically, that of infection, as the discharge is altogether determined on bacteriological evidence. Prof. J. J. Mackenzie and others have recently pointed out that the power of antitoxin is supposed to be expressed by its name, and that the serum is without direct influence on the life of the diphtheria bacillus, and consequently, to a great extent, on the duration of infection. Hospital records furnish exact data as to the comparative length of the term in various years. It was only in 1900 that the antitoxin term was less than that of the non-antitoxin cases, the figures being 18.6 against 19.2 days. In the first cases, from 1895 to 1898 inclusive, the antitoxin term was 1.8 days longer than in the untreated cases, in 1899 it was 4.6 days, and 4.0 in 1901, being 25 instead of an average of 21 days. These figures show that antitoxin does not lessen the duration of infection but apparently increases it.

A word or two may be said about the dose administered. The average number of units given by the hospital physician was generally larger than that considered sufficient by city physicians. Thus, in 1900, the average of the former was 2,350 units against 1,870; in 1901, 2,060 against 2,033 In 1902 there was practically no antitoxin administered at city expense, but the average dose otherwise was 2,750 units. As much as 10,000 units have been given by the hospital physician, and this has

been in one case doubled by the attending physician.

During the past winter the writer visited most of the capitals of Northern and Central Europe, from Denmark to Hungary, and took every available opportunity of learning the feeling and practice with regard to antitoxin. On several occasions he had the privilege of conversing with the highest authorities, and noticed an absence of the exaggerated claims sometimes made on this side of the Atlantic, but, with few exceptions, found that antitoxin was highly esteemed, and was used in most of the large hospitals. Its low price in some countries, as in Austria, where an ordinary dose costs 90 heller—about 18 cents—favors its employment in this way. In most countries the government controls the manufacture of the remedy, and low price and high quality are thus ensured.

Clinical Note.

EPITHELIOMA-X-RAY CURE.

BY EVERETT S. HICKS, M.D. Port Dover Sanatorium.

Mr. G., aged 65, some five years ago noticed an abrasion under the ear, which he thought was a cut from shaving. Within the last year this has extended, and the margins have become thickened. Various opinions were given as to the nature of the trouble, and one practitioner used a caustic and succeeded in burning a hole through the centre of the growth. After this it spread rapidly, and the patient saw Dr. White, of Hamilton, who referred him to me for X-ray treatment. The growth extended from the top of the ear in front to below the lobule and back towards the mastoid. Diagnosis was confirmed by microscope. Avoidance of operation was important on account of the danger of injury to the facial nerve, and on account of the deformity sure to result. First treatment was given August 28th, the tube being two inches from the face, and the face protected by lead foil. Treatments were given every other day until a decided dermatitis resulted. This took about six treatments, and from that time the growth was rayed at irregular intervals, according to the amount of irritation present. Progress was uniformly steady, and the last of the fifteen treatments required was given about October 20th.

Selected Article.

OSLER AND OXFORD.

All Canada congratulates Dr. Osler on his appointment to the Chair of Medicine at Oxford, but it is natural that the medical profession should take the keenest interest in this important event, and the readers of the Maritime Medical News share the satisfaction of their brethren throughout the Dominion and join in heartily wishing the new professor a long and happy tenure of office.

We are all familiar with the career of our distinguished fellow-countryman, and we have learned to look to him not only as one of the great investigators into the mystery of disease, but as also a greatiliuminator of dark places and a safe

and trusty guide.

There are few medical libraries in Canada without their copy of Osler's "Medicine." Indeed, this text-book is not only one of the recognized authorities throughout the English-speaking world, but it has been translated into several European Ian-

guages.

We note with some amusement that many American papers speak of Dr. Osler as an American. And some of them are at a loss to know why he should leave America for Oxford, dwelling especially on the financial value of Dr. Osler's large consulting practice. They cannot apparently understand why a man should make a change except in the direction of a better salary, or why a "distinguished American professor" should leave a new and wealthy American university for one in England, old and by no means wealthy.

A better informed American paper, the Chicago Inter-Ocean, says: "He stands in the front rank of American physicians, and by many good judges is considered the foremost man in his profession. Johns Hopkins is proud of him and devoted to him. Harvard wanted him to reorganize her medical school, just provided with a new plant and a huge endowment. His private practice was limited in size and profit only by his own convenience. England could offer him no materal or professional reward he

could not have here, and yet he goes to England.

"We have not seen anywhere, among all the surprised comment over Dr. Osler's decision, a suggestion of what, we venture to say, was his true reason for accepting the Oxford offer. Although he has lived in the United States for twenty years, and has won here deserved fame and fortune, he was born and bred under the British flag. In science he is of course, a cosmopolite, but we venture the conjecture that he has yielded to an influence that cosmopolites are wont to deride. "It is necessary that a man love his native land," said a Greek poet more than 2,000 years ago. "His words may be otherwise, but his heart is there.' The instinct that leads men, just because they are men, back to the old home when the way is open, no matter what their wanderings or how fair their fortunes elsewhere, would seem to have operated upon William Osler. He can live where he pleases, and so he goes back under the old flag of his youth."

Dr. Osler has always been a true Canadian, loyal to British in-titutions and to the Union Jack.

We believe it is true that he had his little son baptised in the British consulate at Baltimore, so that he might, technically at least, be baptised on British soil.

There are two or three remarks we wish to make on this appointment.

In the first place it is a fact that the foundation of Dr. Osler's extraordinarily complete knowledge of medicine was laid in pathological study. The brilliant clinical studies carried on in Montreal, Philadelphia and Baltimore, had behind them weary hours and days of earnest work in the pathological laboratory of McGill.

And where did Dr. Osler learn the terseness and lucidity of his charming literary style, a style which makes his writings so clear and convincing, and his lectures and addresses works of art? Where, but in the careful and loving study of those ancient classics, those "dead languages," which some misguided people would have us expunge from our educational course.

It is only a few days since, sad to say, in an educational convention in this Province, the noble Mother of Learning, who has called William Osler to her side, was alluded to as "a moss-grown university."

We are making great and rapid progress in Canada, but we think it would be well to hesitate before going further than we have done in "improving" our educational system and in eliminating from it those factors which have produced the sages and scholars and statesmen of Europe for 1,000 years. The study of the classics has for centuries been the strongest feature of the "moss-grown universities" which have trained the leading spirits of the most dominant race in the world, and with very few exceptions, the Masters of Me licine have all been students of the ancient classics. And when Edinburgh calls for a MacGregor from Dalhousie, and Oxford summons an Osler from Johns Hopkins, they give proof to the world that their eyes are open and that their old warm, strong hearts still throb with the true life of a "universal" learning.—Maritime Medical News.

Progress of Medical Science.

MEDICINE.

IN CHARGE OF W. H. B. AIKINS, H. J. HAMILTON, C. J. COPP AND F. A. CLARKSON.

Phototherapy. By Prof. Luigi MARAMALDI.

It was an Italian, Loretti, who towards the close of the seventeenth century maintained that fixed solar light is the most efficacious remedy for phthisis. Villet, at the beginning of the nineteenth century, claimed that he had cured dropsy by exposing patients for several hours in the day to the sun's rays. These early experiments led to a series of physical, chemical and biological investigations, so that what was mere empiricism became scientific.

The difference in action between the chemical and calorific rays of light is very great. The destructive influence of monochromatic light upon bacteria is due largely to the chemical rays. The bacillus of carbuncle and that of typhus thrive better in darkness and under the action of the less refrangible rays. Charcot in 1859 was the first to assert that solar eezema is due to the chemical and not to the calorific rays, and that the dermatitis caused by an intense electric light is of the same nature.

The influence of light on the course of small-pox had, in the nineteenth century, claimed the attention of physicians. Picton in 1832, Black, Barlow, Waters in 1867 and in 1871, had been studying this question. But it was Finsen who tried to interpret thoroughly the observations that had been made, having noted that the parts of the body exposed to light are the seat of deeper and more confluent scars, whereas in patients nursed in rooms in which the light pass of through red glass, suppuration ceased and the scars were trifling. His deduction was that, in the former case, the unfavorable result was due to the chemical rays; in the latter the good result was due to the calorific rays. Swendsen, Jubel-Renoy and Feilberg obtained results similar to those of Finsen. The latter maintained that we must not only exclude the chemical rays of natural light, but also electrical and other forms of intense, artificial light

Finsen's method has been applied in different infective dermatores, and satisfactory results have been obtained in lupus vulgaris and alopecia areata. In his institution there have been treated about four hundred cases of lupus vulgaris, some by the light treatment, others with a previous application to the affected parts of pyrogallic acid ointment, in order to render the skin more permeable to light. The results were good, except in a few cases, where the lesions were too deep and too rapid.

At the Congress of Dermatology in 1900, the conclusion was reached that phototherapy is one of the best methods of treating lupus vulgaris, but that it has two serious drawbacks—the

great expense and the length of time required.

Charinière in 1900, having treated some cases of measles with the red light, observed that the cruption and the bronchitis were improved by it. In epithelioma good results have been reported, but not where the tumor is thick and deep.

It has also been determined that the chemical rays exert a sedative action on the nervous system, while the yellow and the red rays excite it. At Veldes there exists a large institution where every year thousands of patients are treated by eliotherapy (application of natural solar light), under the direction of Rikli, who has given great impulse to the treatment by light and air baths. In the summer these baths are taken between the hours of 10 a.m. and 5 p.m. The head being protected from the sun, the different parts of the body are exposed in turn, until the patient perspires freely. Sometimes a sand bath is added to the sun bath. These baths are preferable to the Turkish and Russian baths, because in the latter the patient must remain in an atmosphere of dry or moist air, at a temperature so high that he often finds it difficult to endure it. Moreover, he is breathing an air deficient in oxygen and filled with the poisons exhaled from his system, producing thus a form of auto-intoxication; besides, the moist air of these baths, having a higher pressure than that of atmospheric air, increases the pressure on the cutaneous vascular areas and thus puts a heavier work on the heart.

Among the artificial lights, that which most closely resembles the sun in therapeutic action is the electric light, either from an arc lamp or from an incandescent lamp. It has not the disadvantage of contaminating the atmosphere with carbonic acid gas or other products of combustion, while, like the solar light, it exerts a favorable action on vegetation, has the same bactericidal power and produces the same effects on the vital functions of man and the higher animals.—Translated from Giornale Internazionale delle Scienze Mediche, by HARLEY

SMITH.

The Relation of the Physician to Proprietary Remedies.

In the Journal Amer. Med. Assn., December 3rd, Dr. Wm. J. Robinson divides physicians into three classes. Class A prescribe everything and anything which may be brought to their

notice, utterly regardless of composition. Class B, on the other hand, have gone to the other extreme and object to every patented preparation; while the third class investigate before they prescribe, adopting a scientific attitude which every physician should emulate. There is a wide difference between a proprietary nostrum and a patented preparation. The latter, as its etymology shows, is an open, non-secret medicine, its method of manufacture being described to the minutest detail when registered. But the numerous "antikamnias," "perunas," "sarsaparillas," etc., which are the curse of this continent, are only trade-marked, and could never be patented at all because there is nothing new in them except their lying advertisements. The true patent encourages invention, the proprietary preparation is a premium on pretence. The "chemical companies" who foist them on the medical public, consist usually of bankrupt druggists, ex-saloon keepers, real estate agents, etc., etc.

Dr. Robinson summarizes his paper as follows:

1. The prescribing and using of preparations, the composition of which is unknown, is to be condemned unequivocally. It is unscientific, unethical, and is bound to react injuriously on the physician and public alike.

2. The physician who refuses to use a thoroughly established remedy of known composition, merely because it is proprietary, is guilty of narrow-minded fanaticism, and he is not doing the

best for his patients.

3. Substitution does exist, and is a serious evil, in some localities.

4. The abolition of substitution lies to a great extent in the physician's own hands, and he can accomplish it by making himself familiar with the physical characteristics of the remedies he prescribes by patronizing pharmacists in whom he has perfect confidence and by exposing those who he is certain are incorrigible substitutors.

5. The physician is guilty of encouraging substitution by ordering every new mixture that is brought to his attention by

circulars, drummers, and venal journals.

6. Prescribing in original packages is an evil, but being a lesser evil than substitution is often justifiable. F. A. C.

Alcohol, its Uses and Abuses.

Progressive Medicine, December 1st, 1904, gives an excellent epitome of the literature on this subject during the past year. The injurious effects of even small doses of alcohol have been beautifully shown by some experiments carried out by Prof. Kraepelin, of Heidelberg. In a perfectly healthy individual so small a dose as an ounce of ethylic spirits (two and a half ounces of whisky) produces an appreciable effect upon sight,

hearing, taste, smell and temperature, as well as cardiac, muscular and mental capacity. In all cases of inebriety there are marked changes in the capillary and vascular system of the brain. The walls of the vessels show fibrinous deposits and sclerosis, while the nerve cells and dendrites are altered and retracted. The kidney, liver and heart show fibrous and fatty deposits.

The records of the large assurance companies of Great Britain show that abstainers constitute by far the better risks the advantage in their favor being from 25 to 45 per cent. If the death rate among non-abstainers be stated as 100 that of abstainers is 72.8 and from cancer, 72. Chronic alcoholism in the fathers seems to have an unfavorable effect upon the

nursing capacity of their daughters.

It has long been a current belief that alcohol was a necessity for Europeans serving in tropical countries, but the experience of Major Fribig, in the Dutch East Indies, contradicts this. Since the soldiers there were allowed the option of drawing money instead of their daily wine, there has been a notable increase in the resistance to disease and fatigue.

Externally alcohol (70 to 95 per cent.) is highly recommended for local inflammatory conditions as a wet dressing, changed every twelve to twenty-four hours.

SURGERY.

IN CHARGE OF EDMUND E. KING, GEORGE A. BINGHAM, C. B. SHUTTLEWORTH AND F. W. MARLOW. .

Thyroidectomy in Exophthalmic Goitre.

Charles H. Mayo, of Rochester, Minn., in an article in the Medical Record, of November 5th, 1904, discusses the surgical treatment of Graves' disease, based on a series of forty cases on which he has performed partial thyroidectomy. The experiments of Dr. Crile on blood pressure, shock and resuscitation would seem to indicate that blood pressure is maintained by the vaso-motor system acting upon the vessels, and that the normal tone of the blood-vessels is, in great part, sustained by the opposing action of the secretions of the thyroid and adrenal If this supposition be correct, it would readily explain the effects of an excess of thyroid or suprarenal secretion. Thus the absence of thyroid tissue in the young, from the unopposed effects of the suprarenals, causing contraction of all peripheral vessels, would explain the retarded growth and development of cretinism. In adult life the same conditions would cause intellectual degeneration and myxedema.

Although the continued exhibition of thyroid extract does not produce Graves' disease, nevertheless some of the most prominent symptoms may be thus produced. Mayo points out that the thyroid, so employed, is abnormal and altogether unlike the internal secretion of the gland absorbed by the lymphatic system, these acting in great part as ducts. hard and practically dry gland, as found in exophthalmic goitre, would indicate unusual activity, and rapid delivery of the contents of the acini into the circulation, whilst in the colloid cystic goitre the secretion may be retained, at least, in Even in cases of exophthalmos, without goitre, Mayo draws attention to the fact that a careful examination usually discloses a small unilateral or bilateral, deeply-scated tumor, which is firmer than normal. The author has noticed that in the X-ray treatment of cervical adenitis the lymph vessels were greatly sclerosed, and has on these grounds used this treatment in a number of cases of exophthalmic goitre with good results—the general nervousness, tremor and tachycardia being markedly benefited, and the exophthalmos the last symptom to show any improvement. He therefore gives the X-rays a place in the treatment of Graves' disease preparatory to operation. Mayo has operated on forty cases with a mortality of 15 per cent, and if two moribund cases be excluded from his total, the mortality is reduced to 10 per cent. He operates on all cases in which the general condition is fair, but if the pulse runs from 130 to 160, with sudden fluctuation in tension and rapidity, if anemia or edema of the feet are present, the patient is put on belladonna treatment for some The more severe types are treated from two to six weeks by X-ray exposures in addition.

Mayo attributes the thyroidism which occurs after partial removal of the gland to absorption of the wound serum with some thyroid secretion in suspension, and he therefore drains these wounds as freely as he would septic processes. He disputes that thyroidism is caused by rough handling of the gland forcing the secretion into the general circulation during operation, owing to the fact that the symptoms do not immediately follow on operation. He advocates suprarenal extract, atropia and morphine for the tachycardia and other symptoms of thyroidism following operations on the gland. The author draws attention to the danger of wounding the right recurrent laryngeal nerve, owing to its intimate relationship to the inferior thyroid artery of that side. The left nerve is situated one-quarter of an inch further back and not so liable to injury. Mayo advocates the Kocher collar incision, giving preference to other as an anesthetic, preceded by the hypodermic injection of one-sixth grain of morphia. In serious cases cocaine infiltration may be used. C. B. S

Substitute for Rubber Gloves in Surgery.

Dr. F. H. Wiggin, of New York, advocates the following as a satisfactory substitute for rubber gloves:

Alcohol (96%)	
Etherāā	Z xlix. ss.
Celloidine	ž i.
M. et ft. sol.; adde ol. ricini	3 ss.

This gives a thick, firm, dry, elastic coating, which does not crack, is insoluble in water and ordinary alcohol. It may be removed by washing the hands in a mixture of equal parts of alcohol and ether.

C. B. S.

Position of Kidney after Nephropexy.

Dr. Augustin H. Goelet. Professor of Gynecology in the New York School of Clinical Medicine, states that it is essential that a movable kidney should be fixed in its proper anatomical position in order to restore its normal action, which has been perverted by the inflammation brought on by its downward displacement. He does not regard the mobility of the organ as the cause of the usual symptoms complained of, but considers the nephroptosis as of prime importance. He rationally concludes that when the kidney is fixed in a position lower down than normal, permanent disability is induced, for whereas before operation the recumbent posture permitted normal replacement and relief from symptoms, whilst after nephropexy in an abnormal situation, no respite is possible from the symptoms for which the operation was undertaken. In women an additional objection to fixation too low down below the rib, is that injurious pressure by corset or clothing is permitted, and the kidney cannot escape as before, and such compression is a constant source of irritation. Hence a low fixation leaves the patient and kidney in a worse position than before operation. The author believes that splitting or peeling the capsule is unnecessary and unwise, because firm attachment can be secured without such mutilation, and that the normal functions of the kidney may be re-established and the associated nephritis subsides, provided the operation is performed sufficiently early, before structural changes have taken place. He does not consider that the usual operation of stitching the kidney, or its partially detached fibrous capsule, to the muscles exposed in the wound is satisfactory, as this procedure must necessarily cause attachment too low down. Dr. Goelet advises bringing the sutures out and tying them on the surface at the upper angle of the wound (Jour. Am. Med. Assn., Nov. 7, 1903) as the best method of securing the kidney in its normal position. He reports 184 consecutive nephropexies without mortality, and without a failure to secure permanent fixation, with subsequent relief of symptoms. C. B. S.

The Function of the Cecum and Appendix.

The Huxley lecture on "The Function of the Cecum and Appendix." by Sir William Macewen, as it appears in the British Medical Journal, October 8th, 1904, page 873, is most interesting and instructive, and is well worthy of careful perusal in its entirety.

The lecturer is not disposed to believe, as undoubtedly many surgeons, anatomists and physiologists do, that the appendix is useless as far as the human economy is concerned. He claims for the cecum and appendix an important digestive function, by virtue of the profuse secretion of succus enterious, which comes from the numerous crypts of Lieberkuhn, which their lining mucous membrane contains, and the presence within them of numerous micro-organisms, and also that the attacks of "indigestion," which so frequently precede appendicitis, 'are very often cecal in nature, the pain being referred to the region of the umbilious through the superior mesenteric plexus of nerves, some of the terminal branches of which supply the appendix.

Attention is called to the presence of large ceca in some herbivorous animals, and in which a large proportion of the digestive processes occur, instead of being completed in the stomach and small intestine as in many carnivorous animals where the cecum is either absent as a distinct pouch, or is very small, and it is asserted that in man, who is alike herbivorous and carnivorous, the cecum and appendix supplement the action of the stomach and small intestine in the digestive processes by further action on the partially undigested material

poured into the cecum from the ileum.

During observations made on a patient whose anterior cecal wall was removed by an explosion, it was found that shortly after a meal was given, a copious alkaline secretion was poured into the cecal cavity from the crypts of its mucous membrane, and through the orifice of the appendix, and that such secretion was more abundant just previous to the pouring of the ileal contents into the cecum through the ileo-cecal valve. valve was considered to be under some such reflex control as is ascribed to the pylorus, emitting only small quantities at a time, and thus allowing a thorough saturation with the cecal and Such contents were observed to be appendiceal secretion. directed over the appendiceal orifice towards the lower part of the cecum, and such movements occurred as satisfied the observers that both the cecum and appendix possessed the necessary neuro-muscular mechanism to regularly empty themselves.

For some time it has been considered that the micro-organisms so constantly present in the intestine, especially its lower part, either favor or assist the final processes of digestion. Their abundance is especially marked in the cecum, and in the appendix as well. Various competent observers have found many existing in the normal appendix, and so we find Sir William Macewen opposing the view of non-utility of the appendix and ascribing to it the ingenious function of a human "culture-tube," producing and pouring into the cecum such micro-organisms as may take a place in the intricate and inter-dependent processes of digestion, and so long as the vitality of these parts remains intact, which will be the case so long as they functionate properly, no harm will ensue.

Were this theory correct it can readily be understood how great would be the light thrown upon the causation and

pathology of appendicitis.

Abrogation of its function by such causes as improper feeding, over-eating, too hasty eating, associated with non-preparation for meals from a mental point of view, or the present day neglect of the digestive and eliminative processes generally, is apt to result in the unnatural lodgement of partially undigested material in the cecum.

It is probable that if the appendix were at all times capable of emptying its contents regularly and freely into the cecum its disease would be rare. Certainly appendiceal colic would cease to exist, and undoubtedly changes of an inflammatory nature would at least be uncommon. Hence one might be justified in ascribing the cause of appendicitis to some form and degree of obstruction as may be brought about by the inadvertent passage of some undigested material into the appendiceal lumen, the unnatural lodgement of intestinal contents in the cecum, or the presence of such conditions as stenosis, kinking, twisting of the appendix, or the formation of surrounding adhesions, any of which may have been due to previous changes of a mild inflammatory type. Any such obstruction persisting, it only needs the ever-present microorganisms to give rise to the pathological changes characteristic of the various clinical forms of appendicitis. Where the obstruction is in the cecum it would seem that primary involvement of the cecum occurs, the appendiceal inflammation being brought about by extension and congestive obstruction in an analogous manner to inflammatory disease of the middle ear complicating, or subsequent to, disease of the pharynx, and as otitis media may persist after the normal state of the pharynx is restored, so may appendicitis persist after the cecum has recovered itself owing to the removal of obstructive material as the result of spurious diarrhea, or the action of an administered enema or purgative.

From the fact that so many appendices have been removed

in recent years and without any apparent ill-effect, it would appear that for the maintenance of a healthy condition the appendix is unnecessary, yet it is now generally acknowledged that various other portions of the body may be removed without interfering to any marked extent with the general health, and it is but reasonable to agree with the lecturer when he states that if the appendix possesses no known function one has no right to assume that it is functionless.

It is impossible to transmit to this brief article even a small amount of the force and weight of the lecture, so that one would strongly advise a careful study of the thoughts expressed therein by Sir William Macewen, who, as the Huxley lecturer seems to have kept the Huxley "truth motto" constantly before him, admitting, as he does, that sufficient time has not elapsed for the thorough attestation of his observations and beliefs.

On the strength of what comes to one from this prominent authority, through his admirable lecture, one may venture to suggest that there is the faintest possibility that time and future of servation may place the appendix in the now largely grown list of body structures which are possessed of an internal secretion; and, furthermore, that such may be of the nature of micro-organismal products which, though unnecessary for the maintenance of a healthy existence, exercise some controlling influence in the general metabolism of the body.

F. W. M.

"Floating" Kidney.

The tendency of modern writers has been to make synonymous the terms "movable" and "floating" as applied to displacements of the kidney. In the British Medical Journal, June 18th, 1904, page 1415, Dr. Newman recalls the fact that there is an anatomical difference between the conditions thus designated that ought to distinctly render the terms non-

synonymous.

Of the two conditions "movable" kidney is by far the more common. In origin it is usually acquired. In all its movements it is behind the peritoneum, and in the operation for its relief it may be exposed without opening through that important structure. On the other hand, "floating" kidney is an uncommon condition. It is congenital in origin, a mesone-phron being present. Its movements occur within the peritoneal cavity, and its exposure necessitates an opening through the peritoneum.

Clinically the two conditions are indistinguishable, as no dependence can be placed on the amount of movement present. However, it seems fitting that the two conditions should be designated separately, and during operations for the relief of a

displaced kidney it would be interesting if surgeons would investigate carefully the actual condition present in order to

determine the absence or presence of a mesonephron.

The cases reported in which a mesonephron was present are so few that one is led to believe that the proper investigation of this point has been neglected. Dr. Newman reports a case of "floating" kidney in which nephrorrhaphy was successfully performed. During the operation a distinct mesonephron was found to be present.

F. W. M.

PEDIATRICS.

IN CHARGE OF ALLEN BAINES AND W. J. GREIG.

Gonorrheal Salpingitis—Recovery After Removal of Tubes-(LENARD A. BIDWELL, F.R.C.S., British Journal of Children's Diseases.)

The trouble occurred in a six-year-old child, and began with vulvitis and painful micturition. Five days later there was a painful swelling over the flexor tendon sheath of the right foot. This was incised and a clear fluid escaped. A few days later pus was seen oozing from the os uteri. On June 28th the temperature was 103°, and there was severe pain in the abdomen with rigidity of the right rectus muscle. The right side of the abdomen was swollen and very tender. Gonococci were found in the vaginal discharges. At a consultation it was decided that salpingitis was present. For a time the patient was better, the symptoms becoming less acute. Later, however, the child became worse, and at operation a double purulent salpingitis was found. The tubes were removed, but the ovaries were saved. The wound healed nicely, but the vaginal discharge continuing, another examination showed that pus was still oozing from the uterus. Under chloroform the uterus was curetted. Within a week the discharge ceased and a perfect recovery followed.

In commenting on the case the writer suggests that if the uterus had been curetted when pus was first seen issuing from it, salpingitis might have been prevented (?) The trouble in the tendon sheath was considered to be gonorrheal rheumatisate.

W T C

Gonorrheal Inflammation of the Uterine Appendages—Spontaneous Recovery. (Dr. Geo. Carpenter, in the British Journal of Children's Diseases.)

Mary W., aged three and a half years, was brought to the out-door department of the Evelina Hospital with a vaginal dis-

charge of six weeks' duration; for pains in the lower part of the abdomen which was swollen; and for frequent micturition. The vulvar discharge contained gonococci. On a bimanual examination per rectum the uterine appendages were found to be involved. On the right side was found an irregularly shaped elastic tumor attached to the uterus, and in size would be one and a half inches in length and three-quarters of an inch in width. On the left side a fusiform swelling was made out, apparently at the extremity of the Fallopian tube. A month later another examination was made when the left side was ascertained to be natural, while the swelling in the right side had much improved. A month later examination was again made, when the right side also was found much improved, but the vaginal discharge was as bad as ever. Three months after, the os uteri was examined with a Ferguson speculum made expressly for this There was no discharge, but the cervical inucous membrane was reddened, and the vagina also in patches.

The author considers that it was a case of gonorrheal salpingitis which had spontaneously recovered. The case is recorded as interesting and also as an example of the value of the bimanual method. The Frenchman Marx is of the opinion that these infantile gonorrheas are apt to rekindle at puberty or at marriage and the husband be credited with it. W. J. G.

Gonorrheal Infections in Children. (Editorial, the British Journal of Children's Diseases.)

It was Bland Sutton who first called attention to the importance of the diseases of the Fallopian tubes. Many infants at the breast die annually from intoxications. In many of these cases the mother's milk is found teeming with micro-organisms. The primary focus can only be surmised to be a purulent vaginal discharge which persists long after the lochial flow. In a few cases a mammary abscess is found, but the micro-organisms from such an abscess are less virulent, and by weaning the child can be saved.

The causation of vaginal discharges in children is less frequently due to defilement by a male than is generally supposed. The female child sleeping with both or either parent comes in contact with dirty night dresses or contaminated bed-clothes, or the child may become infected at the water closet. This mode of origin is often ridiculed, but in a poverty-stricken home where gonorrhea works its ravages, there are few of the bed-clothes and underlinen from which the gonococcus may not be cultivated. Again, we have to consider how the child may sit about on a dirty rug or stool previously contaminated by a drunken parent; the use of a common towel; the appropriation

by a girl at her primary menstruation of a diaper previously

employed by her mother, sister or aunt.

When we consider this question in relation to the diminished birth-rate, to infant mortality, to blindness from ophthalmia, to septic intoxications in infants, we are led to believe that the suffering from gonorrhea at all ages will demand legislation on behalf of the innocent prior to marriage and to avoid the communication of such disease to their offspring.

W. J. G.

Editorial.

THE MODERN NURSE.

The status and character of our modern nurses have been much discussed recently in medical journals of both the old and new worlds. In a recent number of a French journal a Lady Superior in the Pasteur Hospital, Paris, gives her impressions of London hospitals and nurses, derived from personal observation during her recent visit. She was especially struck by the homelike character of the hospitals, where evidently the main desire is not to keep down expenses, but to promote the comfort and well-being of the patients. The well-lighted wards, the pictures, the flowers, and the cheerful fire-places present a striking contrast to the barrack-like appearance of Paris hospi-She was greatly struck by the appearance, manners and efficiency of the nurses in all the hospitals which she visited. She noted the high moral character, the sense of duty, and the technical skill of the nurses. She is confident that they take their profession seriously, love their work, and evince a keen interest in their patients.

It is hinted, however, that English nurses have certain defects. The perfection of their training is apt to give them an overweening sense of their technical knowledge, and thus give rise to a tendency to attach an exaggerated importance to such knowledge, and to relegate the womanly qualities of tenderness, sympathy and tact to a lower place.

The British Medical Journal in commenting says that the French Nursing Superior has here put her finger on the weak spot in our otherwise admirable system of nursing. "The new nurse with the half knowledge that makes her magnify her office is a source of danger in the sick-room, a grievous burden to the household, a nuisance and too often a hindrance to the doctor.

"The nurse here has not yet set herself up as a professional rival to the physician as she has in America. This is probably, however, not due to a less faulty impression, but to the fact that the 'Graduated Nurse' is still unknown among us."

Many physicians of Toronto are comparing our newest nurse, the three years' graduate, with the two years' graduate of a few years ago, and are wondering which of them possesses more of the "womanly qualities of tenderness, sympathy and tact," which are, after all, the important qualities in a good nurse.

FUNCTION OF THE THYROID AND THE PARATHYROID.

It has been suggested by numerous investigators that the parathyroids have a different function from the thyroid gland, and that it was the removal of the former which gave rise to the acute symptoms which arise in certain cases. Kishi (Virchow's Archiv.) however considers that the parathyroids consist of embryonic thyroid tissue, which may, when the thyroid is destroyed, be transformed into normal thyroid tissue. As long as the thyroid performs its function the parathyroids lie dormant, but when the former organ is injured or removed the parathyroids replace it and perform its work more or less efficiently.

Kishi also carefully studied the blood of animals after thyroidectomy, and found that the red corpuscle; rapidly decrease in number, while the leucocytes increase even as high as 38,000. He concluded that there was a toxic substance, probably a nucleoproteid, present in the blood under ordinary conditions, which was taken up by the thyroid and destroyed. This toxic substance he believes to arise from the nuclei of meat cells, taken into the body as food. It is, however, decomposed by the thyroid gland into bodies whose composition is harmless to the animal economy.

This theory would explain why it is that carnivorous animals die immediately after a thyroidectomy, while herbivorous animals lapse into a chronic condition. The toxic nucleoproteid is present in large quantities in animals that eat meat, and they are overwhelmed by it when the thyroid is put out of action.

The corollary which could be attached to this is that no meat should be given to patients after a thyroidectomy till the parathyroids have time to assume the function of the whole or part of the thyroid destroyed.

TORONTO GENERAL HOSPITAL.

Mr. George Gooderham has retired from the Board of Trustees of the Toronto General Hospital after a service of about twenty years. The announcement of his retirement is accompanied by the statement that he has promised a sum of money to the hospital in connection with the large scheme of extension now in view. It is proposed to raise not less than \$1,000,000 by private, civic and Government subscription. The desire of the friends of the hospital is to erect a number of pavilions which, when completed, will form one large hospital for all classes of disease excepting the infectious, and also for maternity cases. It is expected that the new institution, which will be erected and managed chiefly in the interest of the sick poor, will also afford excellent educational facilities to the Medical Faculty of the University of Toronto. The advantages and possibilities of such a hospital for teaching purposes have been pointed out by Dr. Osler and many other distinguished visitors to Toronto in recent years.

The donations of Mr. Cawthra Mulock and Mr. George Gooderham will form the nucleus to a fund which, it is hoped, will reach a goodly size within two or three years. The Ontario Government has appointed Mr. Cawthra Mulock a member of the Board of Trustees of the Toronto General Hospital in the place of Mr. Gooderham, resigned.

BRITISH MEDICAL ACT.

A bill of considerable importance was introduced by Gen. Laurie in the British House of Commons last year, which, however, only received the first reading. It is expected that if it is favorably considered by the profession in the Colonies the bill will be reintroduced at the coming session. The bill provides that where examinations and courses of education at the principal Colonial universities are in all respects similar to those in the United Kingdom, the graduates from Greater Britain shall be eligible to serve in the naval and civil services of the Empire. Surgeons of the highest standing in Canada holding commissions from His Majesty in the Militia volun-

teered for service in South Africa during the war, and a complete field hospital was offered by Canada. In both cases the War Office refused to accept such service, on the ground that it was contrary to the Medical Act of 1858 to permit a surgeon on the Colonial register to attend professionally to British troops. The object of the proposed bill is to relieve this disqualification.

NOTES.

Reunion of Toronto General Hospital Surgeons.

Eight members of the House Staff of the Toronto General Hospital in 1892-93 had a pleasant reunion, December 29th. when they dined at the Toronto Club. Among those present were Dr. Charles C'Reilly, the Guest of Honor; Doctors H. B. Anderson, Herb. Bruce and Harry Parsons, of Toronto; Dr. J. N. E. Brown, of Dawson City; Dr. Middleboro', of Owen Sound; Dr. A. S. Tilley, of Bowmanville; and Dr. H. J. Way, of Chicago.

Dr. O'Reilly congratulated his hosts, one and all, on their great success during the past twelve years, and on their devotion to the honorable profession, four having taken English degrees and two the F.R.C.S., by examination, after having

spent a year in the Toronto General Hospital.

Since 1876 some 220 house surgeons have been on duty in the Toronto General Hospital for one year and longer, and it is intended to inaugurate at once an "association of ex-house surgeons." The mortality has indeed been remarkably small, only eight of the 220 having died in twenty-eight years.

The American Journal of Nursing.

This journal, now in its fifth year, is owned, edited and controlled entirely by nurses, and is standing for higher education for nurses, both preliminary and technical. The Christmas number contains many interesting articles, has many illustrations and presents a remarkably good appearance.

A meeting of the Queen's University Alumni Association of Hamilton was held in that city, Dec. 16th, and a committee was appointed to co-operate with the Committee of the Hamilton Presbytery in raising money to increase the Queen's University Endowment fund. Dr. Malloch acted as chairman of the meeting.

DR. OSLER'S ADDRESS TO THE CANADIAN CLUB.

Dr. William Osler addressed the Canadian Club at their The reception to Professor Osler luncheon on December 29th. by the four hundred members who were present was most enthusiastic.

Professor Osler, who was introduced as one who had become the first physician within the British Empire, was received with loud cheers. He addressed his hearers as "fellow-countrymen," and said it always gave him great satisfaction to return to his old town, where he had received his early education, and where he had so many friends. Taking up the serious part of his subject, Dr. Osler said, as Canadians they had three relations to consider—the country to the south, the motherland and their own Canada. Fortunately, or unfortunately, the nation to the south was one of the most powerful on earth. Briton should be proud of it, for no other nation, ancient or modern, ever had such a child.

A very serious and important influence was that of gravitation, the attraction of the larger body upon the smaller, which caused an incessant dribbling over the border of their young A million Canadians were in the States, many in prominent positions in finance, and in the professions, particularly in medicine and theology. There they had been successful by reason of two special qualities, industry and thoroughness, the only qualities worth anything in the make-up of a young man. If it were only in the matter of draining away the young men, it would make no difference, as plenty were left to run the country. But a more serious loss was that of the young women. He had a patient once, a neurasthenic young man of thirty or so, whose heart was not settled. Dr. Osler asked him why he did not get married. "Because all the girls I wanted have gone to the States," was the reply. Of 651 women engaged in nursing in six of the great eastern hospitals, 196 were Canadians, an enormous proportion, almost one-third.

"Something should be done," said Dr. Osler, to stop the loss of the mothers of the country. He suggested two ways. Introduce a tax on bachelors. At twenty-five or twenty-six, the man who had not a family to support ought to be helping the other fellow, and such a tax would be a reasonable and rational political measure. The other way was an export tax

of \$100 on every girl who left Canada.

"She's worth more," the doctor remarked, while the club hilariously assented. She was worth \$1,000 to the country, and it would pay to give her family that to keep her at home.

In the States, those who went over were taken in and well Never was it asked where did a man come from, but treated.

what could he do? He was impressed with the extraordinary kindness of the feeling there. They were not treated as foreigners, and after twenty years he could say that not once

had the question come up.

They might take a lesson from that, for he had noticed a carping spirit in Canada against Americans. It ill became them to speak in any way derogatory of those among whom a million of their own lived as brethren. He would urge all Canadians, when they thought of the war of the revolution. to think how much that war had done for the Mother Country and for Canada, when it brought over the picked blood of the United Empire Loyalists. When they thought of the Fenian raid they should think of the silent raid going on ever since from Canada, and keep their mouths as with a bridle. they thought of the Alabama claims, they should think of the thousands and thousands of dollars brought over every summer by Americans to Canada. When they thought of the Alaskan boundary, they should think of the trek to the south of their own citizens. He hoped they would live closely and comfortably, in harmony.

British relationship was a very delicate problem. A great many miles separated them, and the tie was, after all, only a tie of sentiment. He said only, but there was no stronger i.e. Sentiment ruled them in every relation of life. It sent their young men to battle in South Africa, and what stronger was needed? Great care was needed by the politicians of the old country and of this to promote a proper and organic unity. Only three courses lay before them, annexation, independence, or some measure of imperial federation. Great nonsense had been. "ed about the difficulties connected with federation, b the could see no remarkable difficulties in contrast with the advantages. The chief difficulty was that Britain beyond the seas wanted everything and would give nothing to the motherland in return. They had to take a share in the responsibilities and could not ask the Mother Country to be constantly provid-

mg for her children.

What were the ideals they should cherish for their own country? He was glad to speak to them as men. Men under forty cherish ideals. After forty they were not so easy to cherish. It was sane and reasonable to think of themselves as a strong race, and they were satisfactorily situated for the development of one strong in body. Rarely had a strong nation appeared elsewhere than in the north. The cold and rigor of the winter was much to their advantage, and would produce a stronger type than any other on the continent. In their generation, by far the most virile nation would dwell north of the Great Lakes. The amalgamation and commingling of the heterogeneous

elements of English, Irish and Scotch was the best mixture the world had seen. He would get it arranged by Act of Parliament that every fourth Upper Canadian should marry a French-Canadian girl, and the future of the race would be assured.

They wanted a strong race mentally. It was easy to grow

corn and potatoes, but they could not grow brains.

"Brains come hard and come high." But they could foster elementary education by well-equipped schools and teachers. No problem was more important than that of getting good masters, for it was not good for the boys to be brought up under women. They must pay better salaries, and make their teachers feel they were doing useful and honorable work for their country, with a prospect of a provision for old age and family. The university problem was rapidly approaching solution, and the rapidity with which the provincial University was growing made him hope it would get to the breast of the province and not be bottle-fed as it has been so long.

Canadian literature, as represented in the magazines and journals, was advancing, and in one line particularly, not much thought of by business men, Canada reached a high level. Poetry was a very important matter, and they should not look disparagingly upon it. Where there is no vision the people perish, had been said of old, and the vision came not so much to the people as by the poets. He would advise them when they had a young fellow scribbling verses in the office to raise

his salarv.

The most important thing was to grow a strong race morally, and it was the hardest of all. He did not think Canada immoral. Homicides were less frequent, and drunkenness not so prevalent, though some of them with Scotch fathers might have a little tissue thirst. Illegitimacy was rare, and divorce rarer perhaps than they would like it to be. Morally the country had made a good start, but there was far too much evil speaking, lying and slandering in connection with political life. It was entirely superfluous and unnecessary. Young men in this atmosphere of slander and hostility towards opponents suffered great harm. He regarded it as an infinitely worse vice than drunkenness. The only way to meet it was simple indeed.

They should deal with political opponents in an every-day Christian spirit, or if not in the character of St. Paul's noble Christian, at least in that of Aristotle's true gentleman. The young were taught to distrust by this mud-slinging, and that very easily passed from the sphere of politics to distrust of one's neighbor, and to a general lack of human sympathy and brotherhood, which they should have to one another as

Canadians.

OPENING OF THE NEW BUILDING OF THE ONTARIO MEDICAL LIBRARY ASSOCIATION.

It was a happy coincidence and strikingly appropriate that the newly-acquired building of the Ontario Medical Library Association should be formally opened by Dr. William Osler, of Johns Hopkins University, Baltimore, whose recent elevation to the regius professorship at Oxford is a source of pride

and satisfaction to his Canadian fellow-countrymen.

The exercises which prefaced the formal opening by the distinguished guest, commenced at four o'clock on the afternoon of December 28th, in the Council Room to the right of the entrance of the new library, which is situated at No. 9 Queen's Park. Dr. J. F. W. Ross, President of the Association, was unavoidably absent, but among those present were Dr. R. A. Reeve, Vice-President of the Association and Dean of the Medical Faculty; Dr. N. A. Powell, Librarian; Dr. Herbert Bruce, Treasurer; Dr. Herbert Hamilton, Secretary; President London and Mr. Chester D. Massey.

Dr. Reeve, in welcoming the members of the association to their new home, considered it a most happy coincidence that Prof. Osler was in the city at this time, for the association owed a great deal to him. Prof. Osler was the largest contributor except one, Mr. Chester D. Massey, who had supplemented his original donation with a gift of five thousand dollars. Prof. Osler gave them more than his gift of one thousand dollars, however, for he had given words of encouragement and advice that were worth more than money, and also some additions to the library. It was appropriate that he should open the library, not only as a large contributor, but as a liberal contributor to the literature of the profession. He had written one of the most popular works on medicine, a work that was not only widely read, but consulted by medical men the world over.

Dr. Osler rose amid applause. It gave him great pleasure to be present, he said, and declare the building open. It was for their intellectual refreshment, always in order for medical men, and for friendly and social intercourse, also always in order. The institution would have a dual influence, a very important direct influence coming first. They could all appreciate their deficiencies. It was a poor doctor, indeed, who had not borne in to him the fact that he could be much better. There was but one way of improvement, the careful and intelligent study of the cases before him. They talked of large experience and years of practice, but these were not necessarily an advantage. Years might bring sterility. Many did not study, and the

older they grew the worse doctors they got to be. They could not study without books, and a good reference library was almost impossible for one doctor to gather together. It was better to subscribe to such a library, and have access to all the periodicals and literature of the profession and keep up his

cases by reference to the experience of other men.

Such a library fostered the best traditions of the profession, which, without disparagement to others, he considered were older, better and nobler than those of any other profession. They would remember the Hippocratic oath and the high aims of the Greek physicians, which never were equaled, and which were theirs to day. In a home of this sort such traditions should be nurtured and fostered. There were few finer than their own local traditions, and in such a place portraits of old notables of the profession should be hung, and books, papers and manuscripts obtained from their families and stored there, as was done in Boston. The family papers of Dr. Widmer were an example, and all of these should be in a fireproof safe. Records of Dr. Bovell, Dr. Hodder and many older men should, and no doubt would, there find an appropriate storehouse.

Such an institution must have an important effect in creating a spirit of fraternity in the profession. There was too much antagonism, yet it was astonishing what a change had taken place in the younger generation. Some of the old men had bad teachers. In the Old Country the students had had bad examples of hostility among the prominent medical men, and who could blane the student who was tainted by their action? "In heaven's name," asked Dr. Osler, "what can we expect from a young man taught under such conditions?" In urging a more fraternal sentiment in the ranks of the profession, Prof. Osler said: "Never believe what you hear against your brother practitioner—not even if you know it to be true."

A little self-sacrifice would do them no harm and stimulate them in connection with the library. When they got past the bread-and-butter stage—and he knew some who had not got past the bread stage—they should help as they were able. The public ought to know how difficult it was for a doctor to save anything in the first twenty years of his practice. As they got on, such a building should become the object of their careful

solicitude.

Amid bursts of laughter he rallied them on their tendency to stock investment and speculation. They had sunk too much in War Eagle and such ventures. Next time a promoter came along they should put \$50 in Golden Fleece and \$100 in the library, a much better investment.

"You might have had the handsomest building in America,

with marble front and Grecian candidate, if you had not been such fools financially. Doctors do not appreciate the fact that no doctor has any financial sense. He is not in the profession where he could get it." The library was only a start. They should have their rooms not only filled with books, but a hall built at the back. "God speed you in your future work," he concluded.

Chester Massey, in a short address, said he had a high admiration for the medical profession, and thought he had a good right to, for he had had more to do with them than most men of his age, and they had treated him well. There was a formidable array of physicians present, and he hoped their presence augured well for the new-born child which he might say was now receiving infant baptism. The grade of service and quality of their work the world over entitled medicine to rank next to theology. An ounce of prevention was worth a pound of cure, and as the ministers sounded their notes of warning it was the duty of the doctors to keep us out of trouble physically, and prevention should be the strongest element in their practice. Mr. Massey said that the contribution of which they spoke should be credited to his father's estate, and that he merited no more credit than the humblest He hoped they would find that they had builded citizen. better than they knew.

Dr. N. A. Powell, the Librarian, whom the chairman described as the man who had done more for the library than any other person, excepting the late Dr. J. E. Graham, was the next speaker. Dr. Powell was disposed to give a great deal of credit to Dr. Ross. Owing largely to the generous assistance of Mr. C. D. Massey, Mr. Timothy Eaton, Mr. E. B. Osler, M.P., and Prof. Osler, they had now, he said, a ten-thousand dollar building paid for, a let under lease, and money on deposit to meet interest, as well as a small surplus. The association, too, was under indebtedness to the trustees of the University of Toronto for their generous consideration in connection with the lease. Extensive improvements were contemplated at the rear, and they must have money to carry on the work. The speaker announced that rooms would be named after the late Dr. Graham and Prof. Osler.

The building is very suitable for the present requirements of the library. The large n rth room will be used for meetings; the south front room for new books and visitors; the room behind as a coffee room. Upstairs there are five large rooms for stacking books and a large bathroom. A large brick building in the rear will be used for surplus books and magazines. Electric lighting and hot water heating are installed throughout the house, which has been known as the Thorne residence, 9 Queen's Park.

THE NATIONAL SANITARIUM ASSOCIATION.

The reports presented at the seventh annual meeting of the trustees of the National Sanitarium Association, which was held at the National Club, December 10th, were of a highly gratifying character, although the increasing demands on the institution call for a heavy outlay next year to insure the continued success of the work.

Sir William R. Meredith, vice-president, occupied the chair, and among those present at the meeting were Senator Geo. A. Cox, W. J. Gage, J. J. Crabbe, Hugh Blain, Edward Gurney, Dr. N. A. Powell, Fred Roper, treas.; J. S. Robertson, secretary; Dr. J. H. Elliott, physician-in-charge of the Muskoka Cottage Sanatorium, and Dr. C. D. Parfitt, physician-in-charge of the

Muskoka Free Hospital for Consumptives.

In the Muskoka Cottage Sanatorium the number of patients under treatment during the year was two hundred and eighteen, rather more than for the previous year, and much greater than any other year. The Training School for Nurses, established during the year, proved a success, and helped materially to strengthen the institution. The ages of patients ranged from fifteen to seventy. One hundred and twenty-five of the patients

were between fifteen and forty years of age.

Dr. J. H. Ellioft, physician-in-charge of the Cottage Sanatorium, keeps himself in close touch with the discharged patients, and in this way is able to gather much valuable information as to the effects of treatment. He states that of twelve patients discharged in 1897-98 apparently cured, ten are in perfect health after the lapse of six to seven years. The other two could not be traced. In the same year twenty-three were discharged with the disease arrested. Four had not been traced. Of the nineteen heard from, four have lapsed and died, and one has died of another disease. The remaining fourteen are as well as on discharge, or better, and almost all are at work. In the year 1898-99 twenty-one were discharged apparently cured. One has not been heard from. One lapsed and died: the remaining nineteen are in good health, and with one exception are at work. A summarized report shows that of cases discharged apparently cured, five or six years ago, 95 per cent are perfectly well, and of the arrested cases 55 per cent. are as well as on discharge, and 19 per cent. are in perfect health.

THE FREE HOSPITAL.

In the Muskoka Free Hospital for Consumptives, which is situated a mile from the Cottage Sanatorium, the parent institution of the National Sanatorium Association, one hundred and ninety-seven patients were treated during the year. These have come entirely from the wage-earning classes, and have comprised forty-five different occupations. Seventy-eight of these were from Toronto; sixteen from Hamilton, five from Ottawa, five from Montreal. The others represented many different parts of Ontario, as well as Nova Scotia and Prince Edward Island. Dr. C. D. Parfitt, in his report of the hospital, refers to the increase of accommodation during the year by sixteen more beds, but the congestion of the waiting list and the many calls for admission show the great necessity there is for further enlargement of accommodation.

In the report of the secretary, Mr. J. S. Robertson, special reference is made to the spread of municipal interest in the work of the Muskoka Free Hospital, shown in a marked manner by the contribution from Hamilton of \$4,000 in eash, besides \$800 from the Daughters of the Empire of that city in furnishings, and a further \$400 that was expended in improving plumbing in the lavatory and wash rooms of the Hamilton and Wentworth County Pavilion. Ottawa has raised some \$4,600, and steps were taken at the annual meeting to provide special accommodation for Ottawa patients. About \$3,000 has also been raised in Montreal, and is being applied to the care of needy patients from that city.

The contributions received on maintenance and capital account for the Muskoka Free Hospital for the year have totaled some \$26,000—the largest since the institution was opened. The expenditure for the year, however, has been very heavy. As other laundries refused the work of the two Muskoka institutions for consumptives, the building of a laundry and the installing of machinery became a necessity, and nearly

\$5,000 had to be expended in this direction.

The trustees, urged by the increasing calls for admission are most auxious to increase the accommodation of the Free Hospital to at least one hundred. This can be done only by an increase in contributions during the new year upon which the association has entered. The amount received through patients on maintenance account is very little. Of the one hundred and seven patients cared for during the year, forty-five were maintained absolutely free; forty-one were charity patients from the city of Toronto, nine from the city of Hamilton. hundred and two patients contributed in part towards their own support, but the daily average amount per patient received from individuals or municipalities was only 471 cents a day-21 cents a day less than the usual hospital per diem allowance. Three hundred and eighty-seven patients altogether have been in residence in the hospital since it was opened less than three years ago. These figures make it very clear that the large bank overdraft against the institution that exists to-day, and hope of further extension can only be overcome by a generous response from the public at large, as the institution is caring for the consumptive poor, without regard to creed or color, from all

parts of the Dominion.

Financially the Muskoka Cottage Sanatorium has made the best showing of any year in its history. The equipment of the institution is complete, and great satisfaction exists among the patients. There is still, however, a bank overdraft on maintenance and capital account of the Cottage Sanatorium of some \$15,000 which has yet to be overtaken.

Reference was made in the secretary's report to the statistics of the Secretary of the Provincial Board of Health, showing a decrease of 40 per cent. in the deaths from consumption in the

last three years.

DEATHS FOR OCTOBER, 1904.

OFFICE OF THE SECRETARY
PROVINCIAL BOARD OF HEALTH.

The health of the Province for October, based upon the returns of 760 municipalities, may be considered highly satisfactory, as the deaths from all causes are 31 less than those reported for the same period last year, yet notwithstanding the population reporting is greater by ten thousand. The most pleasing features of the returns are the reduction in both cases and deaths of all infectious diseases, with the exception of typhoid fever, there being a case decrease of 23 per cent. and in deaths 19 per cent., as may be seen by the table below.

The total deaths recorded from all causes are 2,091, representing a reporting population of 2,092,800, which makes a deathrate of 12 per cent. per thousand, as compared with 6,122 deaths for a population of 2,081,534, for the corresponding period of last year, which gave a death-rate of 12.2 per cent. Smallpox has almost disappeared, only one case being reported for the

month.

Scarlet fever has also reached a very low point, there being 177 cases and 10 deaths, or a case decrease of 23 per cent.

Diphtheria.—As may be seen by the returns, this disease has shown the greatest decrease of any of the infectious diseases, having dropped from 541 cases and 66 deaths to 239 cases, and 34 deaths, being a case decrease of 55 per cent. and in deaths 50 per cent. as compared with the same month a year ago.

Typhoid Fever.—The returns for this disease show but little change over the preceding month, but compared with October, 1903, there is an increase both in cases reported and also in

deaths returned, the increase in the number of reported cases, is no doubt due to the fact that medical practitioners are now aware of their responsibility, and more readily comply with the Act, the marked increase in deaths would indicate the type was more virulent.

In this connection, that portion of the quarterly report of the secretary as adopted by the Board on November 11th last, regarding water supplies, may be quoted, its perusal is worthy of careful consideration by individuals as well as municipal authorities.

It is, however, quite evident from the information to hand, that water pollution is the cause in every instance of the outbreak, which emphasizes the fact that the utmost care must be taken by health authorities to preserve their water supplies from contamination, whether the source be wells, lakes or Too often the relative positions of the well or the intake pipe and the barn, stable or cesspool, are not carefully considered, and a long-continued rain storm results in water contamination by reason of the large amount of surface washings carried directly into the source of supply, with the inevitable result of an outbreak either of enteric fever or some intestinal trouble, according to the specific character of the bacterial infection. To prevent this pollution, it should be the duty of each local Board of Health to employ an intelligent officer to examine periodically into the conditions surrounding the water supply of each inhabitant, and, if necessary take samples for laboratory examination; further, if pollution is found to exist, either the source of the same should be removed or condemned, and the supply from that particular source being unfit for domestic use, forthwith stopped.

Further, municipal authorities must be alert to the fact that what has been a source of good water supply often become, by reason of the rapid growth of the place, a polluted well, stream or lake, presenting a condition which at the time of the inception of the system was never considered. In the case of a town, the sewage emptied into a body of water from which the water supply is taken, has increased to such an extent that admixture takes place through the very increase in volume. In the smaller towns and villages without public systems, the pollution of wells and springs is an ever-increasing difficulty, and it behooves the individual householder and local authorities to bear this in mind and see to it, that these sources are not contaminated by the placing of the cesspools or stables in too close proximity to either, with the rapid growth of towns whereby fields become through the erection of dwellings, the abode of perhaps hundreds of persons, it cannot be expected that what in a primitive state is pure, will remain so.

The question here arises, what is the best course to pursue in

regard to both public and private supplies.

In view of the fact that it is almost impossible to be your brother's keeper and have a control over how and where he shall dispose of his wash, sewage and excreta, and also that water is often polluted at a considerable distance from the point where it is taken for consumption. The one answer is to filter before use, for with the proper kind of filter in use, we have assuredly the best guarantee of always securing a drinking water which is likely to be at all times free from contamination. Though to maintain this standard in the case of corporations, it requires the local authorities to place the system in charge of a comtent official, and this Board should not only require an annual report from the local authorities, but should, for the interests of the general public, institute a periodic inspection of both water and sewage systems.

I would particularly point out the danger of the pollution of milk supplies by reason of the use of the contaminated well water of the farmyard, which water is used to wash out the milk cans—too often I fear is the infection spread from this source, for the cool crystalline spring water of the farmyard is not always free from contamination, and therein often lurks the germ of typhoid.

COMPARATIVE TABLE FOR OCTOBER-THIS YEAR AND LAST.

	1904.		1903.	
DISEASES.	Cases.	DEATHS.	Cases.	Deaths,
Smallpox	1	0	7	0
Scarlet Fever	177	10	232	9
Diphtheria	239	34	541	66
Measles	. 1	1	2	1
Whooping Cough	20	7	30	17
Typhoid Fever	265	63	178	43
Consumption		159	169	169
	872	274	1159	305

CHAS. A. HODGETTS, M.D., Secretary Provincial Board of Health.

Personals.

- Dr. Ward Woolner is practising at Ayr, Ont.
- Dr. H. L. Burris is practising at Lacombe, Alta.
- Dr. W. A. Wilson is practising at Dundurn, Assa.
- Dr. Robert McCaffrey is practising at Armstrong, B.C.
- Dr. C. R. Richardson will remove to 184 Bloor Street W. in May.
- Dr. G. R. McDongah leaves on January 25th for a two months' trip to Algiers and the East.
- Dr. W. T. King Dodds, of Cincinnati, visited his relatives in South Parkdale during Christmas week.
- Dr. S. R. Nichardson, of Eglinton, has been appointed an Associate Coroner for the County of York.
- Dr. Charles Sheard, of Toronto, lectured before the Unitarian Club, at Webb's restaurant, December 19th, 1904.
- W. A. Scott, M.B., F.R.C.S. (Eng.), of 576 Church Street, Toronto, has been appointed a demonstrator of Anatomy in the Medical Faculty of the University of Toronto.
- Dr. Leslie R. N. Hess has recently recovered from a very severe attack of typhoid, and has begun practice in Hamilton, at 648 Barton Street East, in the office until recently occupied by Dr. Thomas Douglas.
- Dr. J. M. Rogers, of Ingersoll, who with Mrs. Rogers and Miss Rogers, of Toronto, left on August 8th for a trip to England, has recently returned, and reports having had a most enjoyable visit. Most of his time was spent in the London hospitals, but he also visited Glasgow and Edinburgh infirmaries.
- Dr. Sullivan announced at the banquet of Queen's Medical College, December 15th, his intention of resigning the chair of Surgery at the end of the present session. Fifty years ago he entered the College as a student, and the authorities of Queen's University will celebrate his Jubilee by conferring upon him the degree of LLD.
- Dr. Robert Koch, of Berlin, started for South Africa, December 17th, to engage in a further scientific investigation of rinderpest and other animal diseases. His last trip devoted to the discovery of these diseases was in behalf of the British Government. In the course of his investigations some problems arose which he had not time to solve. His present trip will be devoted to the study of these problems.

Jan 1905 Obituary.

REGINALD PERCY VIVIAN, M.D.

Dr. Vivian died at his home in Barrie after a short illness from diphtheria, Dec. 8th, aged 30 years. He graduated from the University of Toronto in 1889.

ARCHIBALD S. KIRKLAND, M.D.

Dr. Kirkland died at Collingwood, Dec. 9th, aged 60 years. He was graduated from Victoria College in 1869, and practised for many years at Collingwood.

DAVIDSON MACDONALD, M.D.

Dr. Macdonald died in Toronto, Jan. 3rd. The cause of death was supposed to be dilatation of the heart following lagrippe. He was ordained as a Methodist minister in 1864, and graduated in medicine from Victoria University in 1873. The same year he went to Japan to establish the Canadian Methodist Mission. His headquarters for over thirty years were at Tokio. He was well known in Japan as both a physician and missionary, and was associate physician attached to the British embassy.

ROBERT HENRY SOMERS, M.D.

The many friends of Dr. Bob Somers in Canada were shocked to receive the announcement of his death in the Toronto daily papers of Jan. 4th. Immediately after graduating M.B. from the University of Toronto in 1896, he went to Iowa and settled in LeMors, where he soon acquired a large and lucrative practice. After exposure to cold on Dec. 27th he had an attack of pneumonia. The following Saturday and Sunday he appeared to be doing well, but the next day he took a 'urn for the worse and died on Tuesday, Jan. 3rd, aged 33. He was a son of Mr. Frank Somers, of Toronto, and was well known and much liked by his friends in this city and vicinity.

Book Reviews.

Diseases of the Liver, Gall-Bladder and Bile-Ducts. By H. D. ROLLESTON, M.D. (Cantab), F.R.C.P., Fhysician to St. George's Hospital, London. Philadelphia, New York, London: W. B. Saunders & Co. Toronto: J. A. Carveth & Co., Limited.

This book by Dr. Rolleston is worthy of his reputation and experience, and will at once be accepted as an authoritative work. The research shown and the wide acquaintance with the whole range of medical literature on these subjects will be the admiration of physicians, and the thorough treatment given not only to every part of the subject, but to every detail, is a matter of great satisfaction, e.g., the Section on Cholelithiasis. It is no uncommon thing to find ten or a dozen brief references to clinical cases on one page, each having a footnote mentioning the source with the page, date, etc. A great many instructive cases are given from Dr. Rolleston's own practice and from St. George's Hospital. Diagnosis and treatment are the strong points of the book, which is thoroughly modern and scientific. The illustrations are of marked excellence, and the mechanical appearance of the book leaves nothing to be desired.

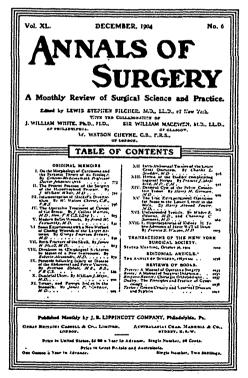
Progressive Medicine, Vol. IV., December, 1904. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 374 pages, 79 illustrations. Per annum, in four cloth-bound volumes, \$9.00; in paper binding, \$6.00; carriage paid to any address. Philadelphia and New York: Lea Brothers & Co., Publishers.

The contributors to this last volume of 1964 are Belfield' Bloodgood, Bradford, Landis and Steele, treating of diseases of the digestive tract and allied organs, liver, pancreas and peritoneum, anesthetics, fractures, dislocations, amputations, surgery of the extremities and orthopedics, genito-urinary diseases of the kidneys, and a practical therapeutic referendum, the latter being one of the best features of the book. In another part of the Practitioner appears an extract on alcohol which we have abstracted from the referendum. This volume is exceedingly helpful to the general practitioner.

The Annals of Surgery, in presenting their concluding number of the fortieth volume, do so in a most elaborate style, the table of contents of which we reproduce in miniature. There are 300 pages of original matter by authors of world-wide reputations on subjects diverse, but of the utmost importance. The illustrations, both half-tone and colored, are of the finest, and enhance the value of the articles very materially. The most

striking paper in the number is one by Prof. Warbasse, illustrated, in which he describes a case so wonderful that if the proof was not positive it would appear like a fairy story. To imagine that so many articles could possibly be swallowed and remain in the stomach, and be removed, is really beyond our belief, but the fact remains, and the case will pass into history as a record breaker.

The first number of the Annals of Surgery appeared January, 1885, and has continued ever since under the same editorial supervision. It is the only journal in the English language



devoted entirely to surgical subjects. One can follow the great strides in surgery during the past two decades in the pages of the Annals and be astonished at the progress. It began in the days of Lister's Spray, and has seen the great success of antiseptic surgery, achieved practically upon the great and solid foundation laid by Lister, but elaborated and carried out by the many noble and grand surgeons since. The surgery of the past was wonderful, but the successes of the present are really due to the advantages gained by Lister's exposition.

The collaborators to the editor, Dr. Lewis S. Pilcher, have had much to do in making the *Annals* what they are. We can safely say the journal is unique, dignified and absolutely ethical. It is with the greatest pleasure that we congratulate the editors and present publishers on the completion of their fortieth volume, and wish them every success in the future, and may they long continue to publish the *Annals* in the same style and rich quality of articles.

Atlas and Epitoms of General Pathologic Histology. By Dr. H. Durck, of Munich. Edited with additions, by Ludvic Hertoen, M.D., Professor of Pathology, Rush Medical College, in affiliation with the University of Chicago. With 172 colored figures on 77 lithographic plates, 36 text cuts, many in colors, and 371 pages of text. Philadelphia, New York, London: W. B. Saunders & Co. 1904. Cloth, \$5.00 net. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto.

This new atias in Saunders' Medical Hand-Atlases is a worthy addition to the series. All the accepted views regarding the significance of pathologic processes have been concisely stated, conflicting theories having been wisely omitted. The illustrations have been made from original specimens without combining different microscopic fields, extraordinary care having been taken to reproduce them as near perfection as possible. In many cases as high as twenty-six colors have been required to reproduce the original painting. In editing the volume, Dr. Hektoen has incorporated much useful matter; and unquestionably this atlas will be as favorably received as the previous volumes on Special Pathologic Histology. In our opinion, it will be found of unusual value to the medical profession generally.

Selections.

The Treatment of Bright's Disease.

Fully fifteen years ago the writer of this editorial began to advocate the employment of a more generous diet in the treatment of chronic renal disease and increasing experience has firmly convinced him that a generous diet in the majority of instances of this malady, provided digestion is in fairly good order, produces much better results for the patient than the institution of a rigid milk diet which for so many years has been

popular with the profession.

We are glad to notice that before the Section of Medicine of the last meeting of the British Medical Association Dr. Hale White, of London, took a strong stand in favor of feeding patients with chronic Bright's disease with an adequate quantity of nourishing material. The loss of albumen through the kidneys is easily compensated, and rarely amounts to enough to cause any drain upon the general system. In other words, albuminuria is not a symptom which requires the employment of remedies, dietetic or otherwise. He well says that under the impression that a small supply of milk is the best diet for diminishing work of the kidneys, the patient with chronic nephritis is starved, and his heart suffers starvation—a state of affairs made worse by the fact that, as the arteries thicken, the heart's work increases. Speaking of the most common type of chronic Bright's disease, namely, interstitial nephritis, he expresses the belief, in which we coincide, that as a rule the disease is treated too zealously, and that in the desire to spare the kidneys the patient is starved, with the result that the only means by which the degenerative process can be retarded, namely, the maintenance of general good health, is impaired. As we do not know of any articles of ordinary diet which can be considered really harmful in granular kidney, it is best to give the patient ordinary plain digestible foods containing the normal proportions of proteids, fats, carbohydrates and salts, just as it is necessary > give a person in health a similar mixed diet. It need hardly be stated that highly seasoned foods, or foods which are difficult of digestion, should be interdicted. Again, we are glad to note that Dr. White is in accord with us in believing that the limitation of these patients to a diet of chicken and fish without any red meat is entirely unne-Not only does such a limitation do no good, but it is often harmful in the sense that it makes the patient consider himself seriously ill and also diminishes his appetite.

In connection with the treatment of chronic parenchymatous

nephritis, Cr. Hale White is even more emphatic, believing that a limited diet makes the misery of the patient greater, and as there is no possible hope of recovery, there is no use in making him suffer by depriving him of articles of food which he desires. As most cases of parenchymatous nephritis do not survive eighteen months after the beginning of the disease, do what we will in the way of treatment, the institution of a strictly limited diet simply adds to the discomfort.

Much discussion has existed amongst physicians as to the quantity of water which should be allowed patients suffering from Bright's disease. Some believe that the amount should be as small as possible on the ground that it engorges the vessels and increases the labor of the heart. That this cardiac influence is an important one we doubt, but as Edsall and others have shown that excessive water-drinking increases nitrogenous metabolism, and as the kidneys in Bright's disease are unable to deal with the products of normal metabolism, it would seem evident that excessive quantities of vater must be harmful. On the other hand, there can certainly be no good result from depriving the patient of water to the extent of making him suffer.

The employment of a rigid milk diet in the treatment of Bright's disease is, we think, an illustration of the willingness of many physicians to follow the advice given them in text-books without a careful consideration of the pathological and physical conditions which may be present in the individual patient, and we think we can state, without fear of contradiction, that the physician of to-day who prescribes the red meats and insists upon a milk diet on the part of a patient suffering from chronic nephritis is following a fashion, rather than a method suggested by a careful consideration of the action of these foods in the body, and the condition of the kidneys and the tissues in general during the progress of this disease.—

Ed. in Therapeutic Gazette.

Quinquaud's Sign of Alcoholism.

A new sign of chronic alcoholism has been lately brought to notice from several juarters, and as it appears to be well authenticated medical men may be glad to avail themselves of such information as it affords. The sign was first discovered by Quinquaud, but was not published to the world till seven years after his death. Since then Maridort and Fürbringer have both directed attention to it. The sign is elicited by making the patient place the tip of his fingers, well spread out, perpendicularly against those of the examiner, when, if the patient is of alcoholic habits, the examiner feels a number of slight shocks as if the phalanges of the patient were rapidly

pressed against each other and against the palm of the examiner. The sensation experienced by the examiners is said to be similar to that of crepitus such as is felt in arthritis deformans, but it has also certain indescribable peculiarities of its own. crepitus can be heard by the stethoscope and sounds like friction, though in autopsies on patients who have exhibited it no undue dryness or roughness of the articular ends of the bones has been found. Nor has it any relationship with alcoholic tremor, for whereas Fürbringer found marked tremor in only 7 per cent. of drinkers, he found Quinquaud's sign present in nearly 92 per cent. The pathology of the condition that produces this creaking is very obscure, and after discussing it Fürbringer concludes that it must be a neurosis, but this result is arrived at more by excluding organic causes than by any positive evidence of nervous derangement. The sign is not likely to be of much practical value, but it is certainly an interesting clinical phenomenon.—Medical Press and Circular.

Eczema.

The following method of treating this condition is given by Lassar, in the *Dermat. Ztschr.*:

It is necessary to inquire very carefully to discover the cause of the cutaneous inflammation. Very frequently the cause is found to be some external irritant rather than some perversion in the constitution or the blood. If the dermatitis is recent. induced by some external irritant, it is necessary to purify the surface, which may be done as follows: A warm bath with the addition of bran and a bland, never a medicated, soap, or by fomenting with an infusion of camomile flowers. Then the affected parts are to be enveloped for half an hour, three times a day, in compresses moistened with a 1 to 1,000 watery solution of zine sulphate. The compresses are to be replaced by fresh ones as soon as they become warm. This alternation of evaporating fomentation and cooling contraction imitates the natural activity of the absorbing capillaries, and is grateful to the patient. Directly on the moist follows the dry treatment, which consists of the free application of a simple dusting powder, the cheapest and most serviceable being a fine pure talc. itching is prominent a 1 to 2 per sent. solution of carbolic acid may be added. If burning is present it is well to add from 1 to 1 per cent. of menthol. By the establishment of a protective layer, frequently renewed and kept in position by bandages, the damaged epidermis is replaced by a regenerated epidermis. This method of procedure in time renders the skin dry and its smoothness can be restored if a paste composed of zinc oxid 60 parts, olive oil 40 parts, be thickly smeared on, dusted over with tale, covered with cottonwool and a light bandage applied. In the

morning the part is best cleansed by olive oil to avoid fresh irritation, If pustules form each one should be opened with an aseptic knife, compresses moistened with aluminum acetate are to be applied and later a vaselin starch paste:

B.	Zinci oxidi,	
	Amyliāā 3 ii	8
	Vaselini	15
М.	Sig. Apply as directed.	

Acidi salicylici gr. x-xx (.6-1.2) may be added if itching is intense. In the parasitic forms, if superficial, this same paste with the addition of from 10 to 20 per cent. of sulphur is efficient. When deeper infiltrations are present a success is hardly possible without tar. The crusted eczema of the face in children can be rapidly cured if managed as follows: It must be carefully cleansed, oiled over, then washed without so muhc friction as to cause bleeding; then thickly smeared with a salve of

B.	Olei rusci,
	Sulphuris sublimatiāā 🖁 ss 15
	Vaselini,
	Saponis domesticiāā ǯ i 30
	Cretæ albæ
M.	Sig. Apply locally, cover with powder and bandage.
	-Jour. A. M. A.

Tuberculous Cystitis.

Hartmann advises the injection into the empty bladder of from three to eight drachms, depending on the tolerance of the bladder, of a mixture of iodoform, one part; sterile liquid vaseline, twenty parts. The patient is instructed to stop the flow of urine when the oil appears. This controls the pain in the bladder. Some patients are able to retain the vaseline for from three to six days. When the pain reappears instillations of from twenty to thirty drops of a mixture of iodoform, 1 part; liquid guaiacol, 5 parts; and sterile vaseline, 100 parts are given once or twice daily. Capsules containing 0.15 grain of iodoform and 0.75 minim of creosote are now administered. Such surgical procedures as excision of tuberculous ulcers of the bladder, or nephrectomy for unilateral tuberculous kidney should be performed when indicated.—Clinical Review.

Miscellaneous.

HYDROGEN PEROXIDE.

HOW BREAKAGE OF BOTTLES CAN BE REDUCED TO A MINIMUM.

(Abstract from the National Druggist, of St. Louis, Mo., October, 1901.)

The greatest obstacle that lies in the way of producing a sound container for liquids occluding gases under high pressure, as, for instance, solutions of hydrogen peroxide, is the fact that no process for making unbreakable glass has yet been discovered.

Up to the present, the ordinary amber glass bottles have been found totally inadequate and untrustworthy, though a device patented by Mr. Charles Marchand goes far towards

overcoming this delinquency.

This device practically reduces the danger of bursting of the bottles to a minimum. As long as the bottles having this device are kept in stock standing up, the pressure resulting from shaking, high temperature in course of transit, etc., will not rise much above four or five pounds to the square inch; and, therefore, though occasionally a bottle may crack or burst, it is not due to pressure, but to the inherent imperfection of the glass, arising either from the lack of homogeneity, or else imperfect annealing, or both, to which we have already referred.

The worst feature of this unreliability in the bottle is, that there is no accurate way of detecting it. A bottle may be submitted to a pressure of a hundred pounds to the square inch, without betraying signs of weakness, yet even with nothing in

it, it may burst or crack within an hour.

The only remedy in these conditions as to the bottles, and that is not absolute, is in changing the material from which the containers are made, and substituting, for the unreliable amber glass, a good article of flint glass. While, as we have intimated, this does not absolutely remove the danger of loss by explosion or cracking, it greatly reduces it, and when the flint glass container is closed by Marchand's Safety Valve Stopper, danger is reduced to a minimum, beyond which, in the present condition of the technics of bottle making, it is impossible to go.

This is exactly what Mr. Charles Marchand, the manufacturer of hydrozone, glycozone, peroxide of hydrogen, etc., intends to do. Just as soon as his present stock of amber glass containers is exhausted, he will use exclusively flint glass,

every bottle being corked with an automatic safety valve stopper. By adopting these expedients, Mr. Marchand, having done all in his power to prevent breakage, can go only one step further—to make good any losses from that direction—replace the bottles that get broken from this cause. Beyond this it would be unreasonable to expect him to assume further responsibility. The actual danger to life or limb from the bursting of a bottle of hydrogen peroxide, or any of Mr. Marchand's preparations, is trivial, as compared with those arising from the explosion of bottles of beer, ginger ale, champagnes and other sparkling wines, or heavily aerated waters.

When any of these rupture, the fragments are driven, not only with all the force and energy of the already liberated gases, but with the augmented energy of the residual gas suddenly set free, and so may inflict severe, sometimes irreparable damage. The safety-valve arrangement in the stopper of bottles of hydrozone prevents the sudden disen-

gagement of a great volume of gas.

Assuming that through some imperfection of the stopper the puncture should close as soon as the pressure from within rose to a point far within that required for the rupture of the bottle, the stopper, not being wired but merely tied down, will be forced out.

But glass is a proverbially brittle and treacherous substance, and it is liable to break in the hands of anybody, at any moment, and without any discoverable or apparent cause, and that whether filled or not. As a consequence there must always be some risk attached to the handling of glass containers. The best that can be done as we have suggested elsewhere, is to reduce the risk of rupture or fracture to a minimum, and this Mr. Marchand has done, not only by his safety stopper device, but also by the promised substitution of the stronger flint glass. The retail trade will, we are sure, welcome this latter change most Lartily, since it completes and supplements the efforts made in the mechanical direction, and thus removes, as far as lies in human efforts, all danger arising from handling Marchand's goods.

We direct the attention of our readers to the medical practices for sale among our advertising pages, offered by Dr. W. E. Hamill, medical broker, who conducts the Canadian Medical Exchange. Physicians desiring to either sell or buy a medical practice cannot do better than take advantage of the doctor's ripe experience and rich equipme t either to secure or dispose of a medical practice. His system certainly offers to the profession a short-cut to the end desired.

An Old Remedy Combined with a Newer One.

The Massachusetts Medical Journal recently published the following, which will no doubt be interesting to our readers:

"We believe that members of the medical profession should familiarize themselves with the combination tablet of anti-kamnia and heroin. The first of these, ant cannia, years ago established a prominent place for itself as a most reliable anti-pyretic, antineuralgic, and general pain reliever, while heroin is, by all odds, the most efficient of recent additions to our list of remedies. The advantages of this combination are fully illustrated by a report of cases submitted to us by Dr. S. Boone, Professor of Surgery and Pharmacology, College of Physicians and Surgeons, St. Louis. We reprint three of said cases, as each has some particular features which successfully called into use in a most beneficial manner the synergetic action of these two drugs:

"Case 1.—J. P., athlete. Suffering from an acute cold. On examination found temperature 101° with a cough and bronchial rales. Patient complained of pain induced by constant coughing. Prescribed antikamnia and heroin tablets, one every four hours. After taking six tablets, the cough was entirely relieved. Patient continued taking one tablet three times daily for three days, when he ceased taking them, and there has been no return of the cough or pain.

"Case 2.—Ed. H., aged 30. Family history—hereditary consumption. Hemorrhage from lungs eighteen months ago. His physician had me examine sputum; found tubercle bacilli. After prescribing various remedies with very little improvement, I placed him on antikamnia and heroin tablets, prescribing one tablet three times a day and one on retiring. He has since thanked me for saving him many sleepless nights, and while I am aware he never can be cured, relief has been to him a great pleasure and one which he has not been able to get heretofore.

"Case 3.—Wm S., aged 28. Lost twenty pounds in last thirty days. Consulted me July 9th. I thought he most certainly would fall victim to tuberculosis. Evening temperature 101° with night-sweats and a very troublesome cough with lancinating pains. Prescribed 1-100 gr. atropine to relieve the excessive night-sweats and one antikamnia and heroin tablet every four hours, with the result that he has entirely recovered and is now at work as usual.

"Neither in these, nor in any other of my cases, were any untoward after-effects evidenced, thus showing a new and distinctive synergetic action and one which cannot help being beneficial."