

Technical and Bibliographic Notes / Notes techniques et bibliographiques

Canadiana.org has attempted to obtain the best 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.

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

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

Additional comments /
Commentaires supplémentaires:

Continuous pagination.

516/k/1317

The

SUBSCRIPTION . . .

\$1.00 per annum, Canada and United States
\$2.00 " " Great Britain and Colonies.

Canadian Journal

of Medicine and Surgery

Vol. III.

TORONTO, CAN., MAY, 1898.

No. 5.

Lactopeptine is used in all Hospitals, and has the Endorsement of the Medical Profession throughout the world.

Preparations of Lactopeptine



Lactopeptine Powder

Containing the five active agents of digestion: PEPSIN, PANCREATIN, PTYALIN, LACTIC and HYDROCHLORIC ACIDS, in the proportions in which they exist in the healthful human stomach.

Lactopeptine Elixir

Represents above preparation in liquid form, combining a tonic with the digestive action. An elegant and palatable preparation.

Lactopeptine Elixir

WITH PHOSPHATES IRON, QUINIA AND STRYCHNIA

A powerful General and Nerve Tonic, in combination with ELIXIR LACTOPEPTINE, as described above.

Lactopeptine Tablets

Each Tablet contains 5 grains of LACTOPEPTINE POWDER. Elegant, accurate in dosage, and exceedingly palatable.



For Sale
by all Druggists.

THE NEW YORK PHARMACAL ASSOCIATION
88 Wellington Street West
TORONTO.

SAMPLES FORWARDED ON APPLICATION

The Difference in Results

from the use of Lithia is due to the manner of its employment. If you have not tried

TABLET **LITHOS** *Effervescent,*

you cannot appreciate the superiority of this combination. **Indicated** in Chronic Rheumatism, Lithema, Gout, Cystitis, Uric Acid Diathesis, etc.

Write for sample bottle, prices, etc.

H. K. MULFORD COMPANY, Chemists,
PHILADELPHIA AND CHICAGO.

In writing, please mention this Journal.

What About the Serum?

Our energies have been directed to the preparation of a high grade Concentrated Serum. The collective investigations of the American Pediatric Society and the Ohio State Board of Health prove that

Mulford's Concentrated Diphtheria Antitoxin

is superior to all others in promptness of effect and percentage of recoveries. Mulford's Antitoxin is supplied in a convenient unbreakable and absolutely sterile package.

Write for full particulars, recent literature, etc.

H. K. MULFORD COMPANY,
CHEMISTS,
CHICAGO. PHILADELPHIA.

ARTIFICIAL LEGS AND ARMS



MARKS' PATENTS of 1854, 1863, 1865, 1880, 1886, 1887, 1892, 1893, 1895 cover all the accredited improvements in artificial legs and arms, and make the Marks' Artificial Limbs peerless. Rubber feet remove jar and make the stump-bearings easy. Rubber hands extend the limits of accommodation.

Light, Durable, Practical. Do not get out of order, and inexpensive to wear. Appreciated by over twenty thousand wearers and thousands of surgeons of prominence. Twenty-nine highest awards.

Purchased by the United States and several other governments, railroad companies and other large corporations.

The limits of the utility of Marks' Artificial Limbs are unbounded. Persons wearing them engage in every occupation and profession.

This cut is from a photograph of John J. Winn, Signal Quartermaster on **U. S. S. Oneida**, who lost his leg above the knee and arm above the elbow, by the explosion of a shell while the steamer was engaged in the attack on Forts Jackson and St. Philip, under the command of **Admiral**

Farragut, April 22, 1862. The following letter tells what the old warrior knows about Artificial Legs and Arms :

MR. A. A. MARKS.

DEAR SIR,—I write you this simply to say that my experience with your Artificial Limbs, together with considerable experience with other kinds, induces me to prefer yours by all odds. The special point I desire to mention is the simplicity of construction in your leg, whereby I can take it apart, lubricate and adjust with my one (natural) hand, and put together again without any help. My good solid weight of two hundred and forty pounds gives the leg a good trial, and yet I feel a confidence in it that I had never had in any other kind.

Yours sincerely,

JOHN J. WINN.

Send for **Marks' Treatise on Artificial Limbs**, and become acquainted with particulars. The book contains 544 pages, illustrated by 800 cuts, and a thousand testimonials. Instructions are given how to take measurements and obtain artificial limbs without leaving home.

ESTABLISHED OVER 45 YEARS.

A. A. MARKS, 701 Broadway, New York.

When writing advertisers, please mention THE CANADIAN JOURNAL OF MEDICINE AND SURGERY

KING'S PUREMALT

No similar preparation has ever gained favor so quickly with Physicians and Nurses as has **KING'S PUREMALT**.

As its name indicates, it is a pure extract of malt, entirely free from acid, gum, glucose or any other adulterant or thickening substance.

KING'S PUREMALT possesses both a prophylactic and therapeutic value. It is especially adapted to the needs of the aged, and for nursing mothers it is indispensable. It is a nerve sedative, and as such, brings the blessings of quiet and restful sleep to those troubled with insomnia. It is a tissue builder, and as such, is of the highest value to convalescents. It is an aid to digestion and assimilation of food, and as such, may be used by dyspeptics with the most favorable results.

In all our literature we emphasize the medical value of **PUREMALT** as an aid to the hardest work of the conscientious physician, the **BUILDING UP** after the crisis is past.

Physicians and Nurses, and all others interested, are invited to write for our literature. It will be found not only instructive but also entertaining.

PURE FOOD DEPARTMENT

CHARLES A. KING, Boston, Mass.

AGENTS FOR ONTARIO:

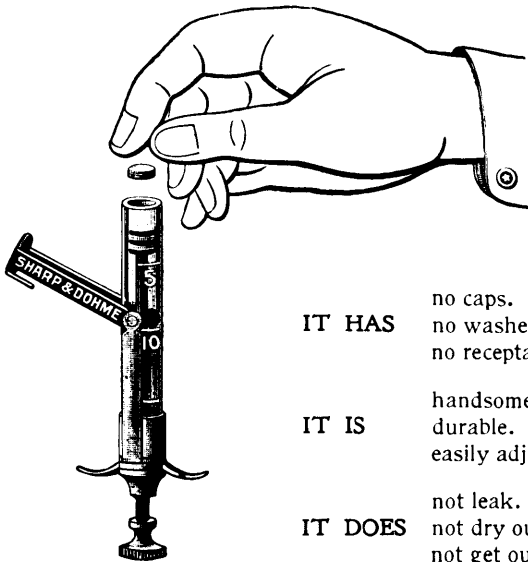
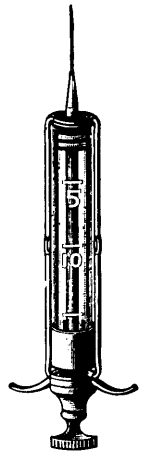
S. B. CHANDLER, SON & CO., Limited,
Toronto, Ont.

When writing advertisers, please mention **THE CANADIAN JOURNAL OF MEDICINE AND SURGERY**.

YOU CAN BOIL OUR

Aseptic Syringe

and keep it clean with the least amount of effort.



- IT HAS no caps.
no washers.
no receptacles for dirt.
- IT IS handsome.
durable.
easily adjusted.
- IT DOES not leak.
not dry out.
not get out of order.

IT COSTS \$3.00 together with the smallest, handsomest aluminum case that holds six tubes of our soluble Hypodermic Tablets and two needles.



SHARP & DOHME

BALTIMORE

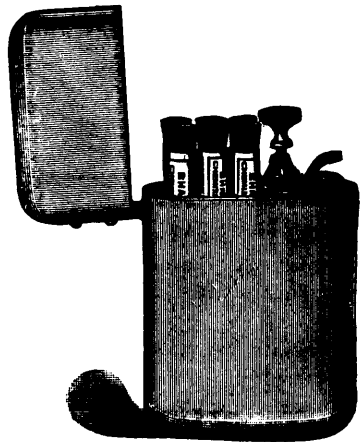
CHICAGO

NEW YORK

Messrs. DART & CHAPMAN

MONTREAL, CAN.

Canadian Representatives



WYETH'S SOLUTION

Peptonate of Iron and Manganese*(LIQUOR MANGANO-FERRI PEPTONATUS-WYETH.)*

Physicians will find very useful in the following diseases : *Scrofula, Anaemia, Chlorosis, Amenorrhœa, Debility* from various causes, *Convalescence* from acute fevers and surgical operations, *Nervous Maladies*, such as *Graves's Disease, Neurasthenia, Epilepsy, Cretinism*, and any other *Nervous Condition* requiring a *Tonic Strengthening Medicine*, in *Rickets, Pyloric Stenosis, Phthisis, Diabetes*, etc., etc.

This remedy is of pleasant, neutral taste. It can readily be taken in a little water, milk or sweet wines, free of tannin, as may be preferred. Is non-astringent, and does not injure the teeth or constipate the bowels.

WYETH'S ELIXIR

ANTI-DYSPEPTIC

Will be found peculiarly efficacious in those derangements attended with flatulence, acid fermentation, eructation superinduced by eating rich food, pastry, starchy vegetables, excess in drinking spirituous liquors, and excessive smoking. It will prove equally valuable in almost every condition of weak and impaired or imperfect digestive powers, either due to catarrh of the mucous coat of the stomach or in those symptoms characterized by sensations of distress and uneasiness during digestion, usually termed Nervous Dyspepsia.

Each dessertspoonful contains : Pepsin 1 gr., Pancreatin 2 grs., Cascara Sagrada 1 gr., Ipecac 1.5 gr., Strychnine 1-60 gr., with the active constituents of 30 minims Antiseptic Solution.

Samples of the above will be forwarded to any practicing physician, free of expense, upon application to

DAVIS & LAWRENCE CO., LIMITED,

General Agents for John Wyeth & Bro.

MONTREAL.

Contents.

Original Contributions—	PAGE	PAGE	
The Treatment of Inebriety. By A. M. Rosebrugh, M.D.	237	Regular Meeting of State Board of Health, Lansing, April 8, 1898	271
Some Remarks on Mechanico-Therapeutics. By T. J. M'Gillicuddy, M.D.	244	Report of Deaths from Contagious Diseases in Ontario, for the months of February and March, 1898	274
California as a Tourists' Resort. By John Hunter, M.D.	249	Proceedings of Societies—	
How to Hypnotize. By Sydney Flower, LL.D.	252	Trinity Medical Alumni Association.....	275
Surgery—		Editorials—	
Remarks on Rectal Surgery	256	Intestinal Obstruction	277
Surgical Pathology.—		Formaldehyde Disinfection	279
The Practice of Evisceration in Abdominal Surgery and Shock—An Experimental and Clinical Study	259	Transmission of Infectious Diseases by the Atmosphere	281
A Few Brief Notes on the Morbid Anatomy or Essential Elements of True Tumors.....	262	The Medical Treatment of Inebriety.....	282
Pharmacology and Therapeutics—		Physical Training in the Public Schools	283
Peronin, a Substitute for Morphine.....	264	Newspaper Publicity.....	284
Mental Suggestion.....	265	The American Medical Association, Denver Meeting, June 7th, 1898.....	285
Public Health and Hygiene—		Medical Orders for the Army of Invasion.....	286
Provincial Board of Health	267	The American Railway Surgeons' Association.....	287
		Medical Council Elections.....	287
		The Physician's Library	288

CONSTIPATION

in any of its forms, and in the most delicate conditions, is best relieved by the

Franz Josef Natural Aperient Water

The action is gentle, prompt and thorough. The taste is not disagreeable.

The **Franz Josef** is employed and recommended by the leading medical luminaries of Europe and America.

Prof. Ch. Gerhardt, of Berlin, wrote:—"I have employed the **FRANZ JOSEF WATER** frequently, and always with a sufficient and certain success."

Prof. Oser, of Vienna:—"I frequently order the **FRANZ JOSEF PURGATIVE WATER** in the Rothschild Hospital and in my private practice, and I obtain, even with small doses, satisfactory results in all cases."

Prof. von Nussbaum, of Munich:—"The **FRANZ JOSEF WATER** acts quickly and painlessly and often by the use of surprisingly small quantities."

Prof. von Bamberger, of Vienna:—"I have used the **FRANZ JOSEF WATER** in my clinic many times and do not hesitate to declare that it is one of the most powerful of the bitter waters. Its constant use leaves no injurious effects."

In Liver Torpidity, Portal Congestions, Jaundice, etc., the **Franz Josef** may be ordered with perfect confidence.

DOSE.—For children, $\frac{1}{4}$ to 2 wineglassfuls; for adults, 1 to 3. Taken before breakfast a satisfactory movement usually follows the meal.

Wholesale Depot for Canada and United States,
Elijah J. Molloy, 101 Beekman Street, New York.

WYETH'S LIQUID MALT EXTRACT



WYETH'S MALT EXTRACT

contains all the nutritive virtues of the best malt liquors in a much higher degree than any other product with which it can be compared, and the least amount of alcohol (3 per cent.) of any like preparation which avoids the distressing consequences experienced from the use of spirituous liquors, or malt extracts containing a large amount of alcohol.

WYETH'S MALT EXTRACT

is agreeable to take, and is a valuable nutrient, tonic and digestive agent, containing a large amount of extractive matter. Those of the medical profession who have given the subject of malt extracts careful study are unanimous in endorsing all the claims that are made for it.

WYETH'S MALT EXTRACT

is especially adapted to nursing mothers and children, to those suffering from nervous exhaustion, chilliness, and to those unable to digest starchy food. It also acts as a roborant in all cases of debility, and is a most valuable addition to the treatment required in convalescence.

WYETH'S MALT EXTRACT

is practically a liquid bread that is partly digested. It has for its prime object the production of nutriment, and the entire process of manufacture is devised for the purpose of attaining that end.

WYETH'S MALT EXTRACT

is a purely pharmaceutical preparation, and we would caution physicians when ordering to specify "Wyeth's," as it is well known that there are a great many so-called malt extracts in the drug stores which contain such an amount of alcohol that it is not safe to leave the choice to the discretion of the patient, who might be prevailed upon to purchase an inferior article on account of its being a little cheaper.

Free sample bottles of Wyeth's Liquid Malt Extract will be sent to any practicing physician in Canada upon application.

PRICE, \$3.50 PER DOZEN BOTTLES

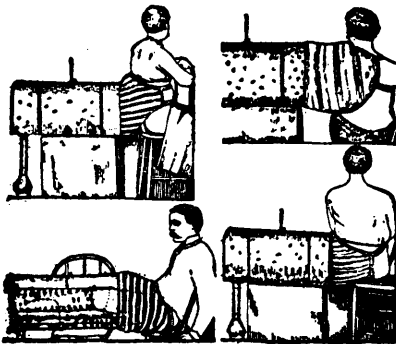


Davis & Lawrence Co., Limited

SOLE AGENTS FOR CANADA MONTREAL

PUBLISHERS' DEPARTMENT.

PAGE	PAGE	PAGE			
Abbey's Effervescent Salt	40	Grand Hotel Co.	99	Parke, Davis & Co.	17, 18
Abbott Alkaloidal Co.	19	Gray, William.	28	Paris Medicine Co.	46
Alaska Feather and Down Co.	57	Greene & Co., Chas. Truax.	15	Parisian Steam Laundry Co.	85
Alpha Rubber Co.	31	Greig & Co., R.	34	Paul Paquin Laboratories.	72
Alma, The.	55	Gundlach Optical Co.	82	Peacock Chemical Co.	12
American Dunlop Tire Co.	85	Halsey Bros.	44	Pickering, Mrs.	38
American Rubber Tire Co.	94	Halford, Robert.	22	Polk & Co., R. L.	96
American Tobacco Co., Ltd.	93	Hamill, Dr. W. E.	99	Pond's Extract Co.	104
Antikamnia Chem. Co.	42	Hamilton & Co., A.	22	Provincial Trust Co.	20
Arlington Hotel.	100	Harvey Co., G. F.	38	Psychic Publishing Co.	81
Armour & Co.	50	Hendry, F. T.	72	Radnor Water Co.	9
Atchison, Topeka & Santa Fe Ry.	97	Hoehn Co., The R.	74	Reichardt & Co., F. A.	33
Beaver Line.	80	Hotel Traymore.	27	Renner, Dr.	9
Belle Ewart Ice Co.	77	Howard, A. H.	97	Resinol Chemical Co.	53
Bell Nozzle Co.	79	Hunt Saddle Co.	73	Rice Lewis & Son.	20
Benger's Food.	30	Imperial Granum Co.	49	Rochester Optical Co.	82
Bethesda.	23	International Fibre Chanois Co.	12	Royer & Rougier.	13
Betz Co., F. S.	7	I. O. F.	78	Scott & Bowne.	55
Bilte, Auguste.	26	Jackson Sanitarium.	41	Sharp & Dohme.	3
Bovinine Co.	39	Kennedy, J. H.	96	Sharpe, Eakins & Ferris.	23
Bovril Limited.	61	Kidder Manufacturing Co.	24	Sharp & Smith.	57
Brand & Co.	53	King, Charles A.	2	Shipway Iron Works.	103
Breitenbach Company, M. J.	48	Labatt, John.	34	Slocum's Emulsion.	37
British Antitoxin Mfg. Co.	67	Lambert Pharmacal Co.	51	Smith, Kline & French Co.	21
Bromo Chemical Co.	42	Lander, Norman B.	9	Spooner, W.	74
Brown & Co., G.	41	Leclanche Battery Co.	25	Southern Pacific Railway Co.	102
Buffalo University.	99	Lepage Manufacturing Co.	15	Standard Silver Co.	31
Calvert & Co., F. C.	45	Lyman Sons & Co.	32, 44	Stearns & Co., Frederick.	16
Canadian Typograph Co.	65	Macdonald, A.	90	Stevenson, H. M.	92
Castle & Co., Wilmot.	45	Magor & Co., F.	24	Sutherland, J. A.	90
Chicago Policlinic.	35	Marks, A. A.	1	Swan Bros.	81
Chloride Battery Co.	Cover	McGill & Co., William.	81	The Canadian Cigar Co.	100
Christie Brown Co.	31	McGill University.	89	Toronto Electric Light Co.	35
Church & Byrne.	43	McIntosh Battery & Opt. Co.	67	Toronto Salt Works.	74
Cowan's Hygienic Cocoa.	90	McLaughlin, J. J.	8	Toronto Tire Co.	84
Cramer Dr., Plate Works.	47	Merck & Co.	69	Toronto Wine Co.	?
Davis & Lawrence Co.	4, 6, 63	Michigan College.	28	Trust Corporation of Ontario.	15
Deitz Co., R. E.	80	Missouri Pacific Railway Co.	75	Underwood & Co., G. B.	84
Detroit and Cleveland Nav. Co.	81	Monsoon Indo-Ceylon Tea.	45	Vichy.	Cover
Detroit College of Medicine.	86	Montague Private Hospital.	14	Victor May & Co.	8
Dominion Dyewood & Chem. Co.	71	Moor, Josh.	28	Virtue & Co.	95
Duncan, Flockhart & Co.	32, 43	Mulford Co., H. K.	Cover	Wacks Bros., Messrs.	87, 88
Eastman Kodak Co.	101	National Blank Co.	11	Walden & Co.	30
Elder, Robert.	90	New England Vaccine Co.	90	Walker & Co.	38
Electro-Medical Mfg. Co.	80	New York Condensed Milk Co.	25	Walker, Dr. Holford.	29
Elliott Illustrating Co.	74	Niagara Falls Line.	77	Walker & Sons, Hiram.	36
Empire Manufacturing Co.	98	Nordheimer, A. & S.	77	Wampole & Co., Henry K.	10
Everett House.	99	North American Chemical Co.	24	Weston, Geo.	43
Evans & Sons.	16	North-West Development Co.	76	Wheeler Chemical Works.	74
Fairchild Bros. & Foster.	47	N. Y. Pharmaceutical Co.	23	Wheeler's Tissue Phosphates.	92
Federal Life Assurance Co.	92	N. Y. Polyclinic.	86	Wilson & Co., L. A.	25
Fellows Med. Manuf. Co.	Cover	N. Y. School of Clinical Medicine.	85	Windsor Salt Co.	35
Fessenden Manufacturing Co.	46	N. Y. Tire Co.	94	Wood, W. Lloyd.	67
Flavell & Bro., G. W.	91	Od Chemical Co.	77	Woolrich & Co.	30
Franz Josef Water.	5	Ontario Vaccine Farm.	90	Yucca Manufacturing Co.	37
Georgetown University.	92	Pabst Brewing Co.	21, 104		
Gerrard Street Livery.	90				
Gibson, R. L.	Cover				
Gilmour Bros. & Co.	59				
Goertz, C. P.	83				



The BETZ Hot Air Arm and Leg Bath

Directs hot air up to 400° F. to arm, leg, hips, shoulder or kidneys. It will penetrate the deepest tissues.

Specialists claim it the greatest invention of the age. In the treatment of ankylosis, varicose veins, articular rheumatism, infantile paralysis, muscular atrophy, arthritis periostitis, gout, nephritis, effusion about the hip-joint, dropsy, swollen joints.

Price \$12 and \$20, with all attachments. Money refunded at end of 30 days if not the only cure for above ailments. We make 8 styles; 27,000 sold to physicians. \$5 Vapor Baths to physicians for \$2. Catalogue of 150 things you use daily, Free.

BETZ & CO., 78 State St., Chicago, Ill.



McLaughlin's Matzal

The first **TRUE KEFIR** to be made in Canada. Made from sterilized milk and the lactic, i.e., the **natural** milk ferment. Contains **no yeast** (an extraneous ferment). The casein is coagulated, and the albuminoids peptonized.

MATZAL is ready for instant assimilation, and
**No known Food will make
Blood more rapidly!**

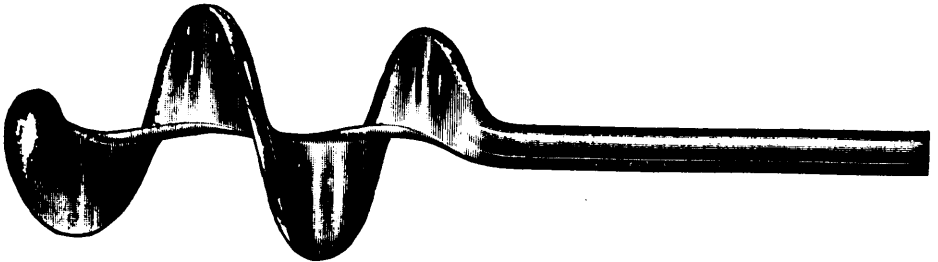
It is being used with excellent results by **leading Toronto Physicians!** It is unequalled as a nutrient or as sole diet in all wasting diseases, as Tuberculosis and Bronchitis; in convalescence after Typhoid and other Fevers; in Dyspepsia, Insomnia, etc.; and in Bright's Disease, Diabetes, etc., where a nitrogenous diet is required. Supplied to patients at the very low price of

\$1.50 PER DOZEN PINTS

CIRCULAR ON APPLICATION.

J. J. McLAUGHLIN, MANUFACTURING CHEMIST.
153-155 SHERBOURNE ST., TORONTO

The Curette worms its way past all contents and expels same by pushing them from above downward as we often would like the fingers to do, accomplishing this by external rotation of the handle alone.



St. Cyr. Curette and Evacuator

In offering the St. Cyr Curette and Evacuator to the medical profession we are proud to say that we are offering an instrument equal in usefulness to the Obstetrical Forceps, and much more often a necessity to the busy practitioner, as more mothers die from retained after-births than from retained foetus. This instrument takes the same place in regard to the "soft" secundines which the Obstetrical Forceps holds to the "hard" head of the child; the mechanical adaptation is just as perfect, e.g., "one pulls on a hard resisting mass," the other "pushes" out a "soft, unresisting, friable substance."

In cases of emergency, such as Sepsis, to insure its quick delivery to you by next mail, remit by Postal or Express Money Order, or by Draft on a Chicago Bank. We also Express C.O.D.

To meet all cases, from the normal cavity to that of the ninth month, the set of two sizes is absolutely necessary.

Small, Blunt - - - \$3.50 | Large, Blunt - - - \$3.50

The Complete Set of Two Sizes - \$6.50

By special request we have obtained the permission to reprint the author's monograph, which will be sent on application.

VICTOR V. MAY & CO.

Wholesale Dealers and Manufacturers of **389-391-393 West Twelfth St.**
SURGICAL INSTRUMENTS. **CHICAGO, ILL.**

N.B.—Letters Patent for the St. Cyr Curette and Evacuator granted by the U. S. Government, June 15, 1897; by the Dominion of Canada, Sept. 9th, 1897.

RADNOR WATER

The Purest and Most Delicious of Natural Table Waters. Fresh and Sparkling from the Canadian Laurentian Hills, especially adapted for use in the sick room, and unequaled as an exquisite dilutant with wines and liquors.

ANALYSIS OF RADNOR SPRING WATER

By J. T. DONALD, M.A., *Professor of Chemistry, Medical Faculty, Bishop's College, Analytical and Consulting Chemist and Assayer.*

MONTREAL, June 14, 1894.

"I hereby certify that I have analyzed the sample of Radnor Water received from the Canada Iron Furnace Co., Limited, and find the following results in 10,000 parts of water:

Chloride of Sodium.....	14.354	Bicarbonate of Sodium..	1.697
Chloride of Potassium.....	.211	Carbonate of Lime.....	2.940
Sulphate of Sodium.....	.210	Carbonate of Iron.....	Traces
Sulphate of Magnesia.....	1.262	Silica.....	.145
Bromide of Sodium.....	.080		
		In 10,000 parts of water..	20.899

"A purely natural water, brilliant, pleasantly sparkling, and delicate to the taste."—*The Lancet*, London, Eng.

"Radnor is a most refreshing and palatable mineral water for table use, and mixes well with any wines or spirits. It deserves to take its place in the front rank of table waters."—*The Nursing News and Hospital Review*, London, Eng.

RADNOR WATER CO., MONTREAL AND RADNOR, QUE.

"Radnor" can be obtained from all leading Druggists, Grocers, and all principal Clubs, Hotels, Restaurants, etc.

DR. RENNER'S

ESTABLISHMENT FOR
VACCINATION WITH CALF LYMPH

186 MARYLEBONE ROAD, LONDON, N.W.

"The Oldest Original CALF VACCINE INSTITUTION in England."

Prices of Calf Lymph— "GLYCERINATED."	{	Tubes { Large	- - - -	2s. each, or three for 5s. 6d.	
		{ Small	- - - -	1s. each, or three for 2s. 9d.	
		Sufficient for one Vaccination only -		2 for 1s., or 6 for 2s. 9d.	
		Squares	- - - -	2s. 6d. each.	

Sent on receipt of remittance addressed to the **MANAGER** of the Establishment. Agents Wanted.

Registered Telegraphic Address: "VACCINE, LONDON."

Card to the Medical Profession

Telephone 5240

T

HE attention of the Medical Profession in Toronto is respectfully called to the fact that

I make a Specialty of Dispensing Physicians' Prescriptions

And I solicit their patronage.
Only the best goods used.
Graduates only employed.
Prescriptions promptly delivered night or day.



NORMAN B. LANDER,

708 Queen St. West
Cor. Manning Ave. Toronto.

MODERN THERAPY

Butylamine, C₄ H₁₁ N.

Dihydrotoluidine, C₇ H₁₁ N.

Amylamine, C₅ H₁₃ N.

Aselline, C₂₅ H₃₂ N₂.

Hexylamine, C₆ H₁₅ N.

Morrhaine, C₁₉ H₂₇ N₃.

Are the alkaloids derived from Cod Liver Oil, and which, separated from the oil, act directly and powerfully upon the nerve centres which preside over nutrition and provoke a denutrition and a rapid assimilation correlative to the waste. They are excitants of general nutrition, and favor organic resistance.

WAMPOLE'S PERFECTED AND TASTELESS PREPARATION OF THE EXTRACT OF COD LIVER OIL

The first preparation bringing these precious medicaments to therapeutics, and the only original preparation of the alkaloids of Cod Liver Oil containing these alkaloids and other medicinal principles (Lethitines—Phospho Glycerites) obtainable from one-fourth its volume of pure Cod Liver Oil. These principles are extracted from the oil while it is yet contained in the fresh cod livers,

AND COMBINED WITH

Extr. Malt.

Physiological Action: Valuable food.

Therapy: Easily assimilated food in convalescence or wasting diseases, increases muscular tissue, and augments fat.

Fld. Extr. Prun. Virg.

Physiological Action: Astringent, tonic, sedative.

Therapy: Tonic, lessening cough and expectoration, strengthens digestive organs, and reduces fever.

Syr. Hypophos. Comp.

Physiological Action: Accelerates cell and tissue growths, tonic and stimulant.

Therapy: Tonic restorative, reduces sweating in nervous debility, promotes nutrition, arrests fatty degeneration.

Copy of analysis, circular matter, giving clinical results obtained by the use of Wampole's Preparation, samples for trial, etc., cheerfully furnished free of charge upon application.

Prepared solely by

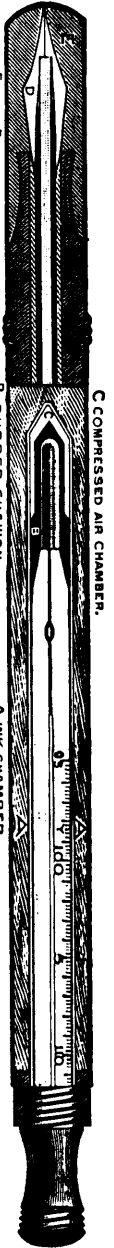
HENRY K. WAMPOLE & CO.

Manufacturing Pharmacists

TORONTO, CANADA.
MEXICO CITY, MEXICO.

441 Green St., Philadelphia, Pa.

When writing advertisers, please mention THE CANADIAN JOURNAL OF MEDICINE AND SURGERY.



THE THERMO PEN

is the Medical Novelty of the Century, and without any doubts the most useful article to be found in the possession of the medical man. It consists (as will be readily noticed) of a first-class Fountain Pen, made of the finest materials and is furnished with a 16-karat gold nib, which can be procured either broad or fine in the point, so as to suit the writer. At the other end of the pen is attached a Clinical Thermometer, which screws into an enclosed cavity in what is usually the ink chamber, the fluid for the pen being kept entirely separate from the thermometer, and not interfering with it in any way. The thermometer is one of the best instruments, and in each case is sold with a certificate as to its accuracy. The Thermo Pen can be carried round in the upper waistcoat pocket and occupies no more space than the ordinary fountain pen does. This Fountain Pen alone sells at \$3.00. We offer the combination of Pen and Thermometer for

\$3.50



THE "FOUNTAIN PEN" SYRINGE.

Another of our novelties is our Rocket Gonorrhoeal Syringe, which to all appearances is a fountain pen. The syringe is the same size, length and shape as a pen, and at one end has in it a cavity in which can be carried round a dozen or more tablets, each one of which on being dropped into two drachms of water makes a solution all ready for use. This instrument is one which will command a very ready sale, and we ask the medical profession to look into its merits, and order it for their patients. The price to the profession is

50 Cents.

The tablets can be procured according to any private formula from any manufacturing druggist. We will be glad to send either of these articles direct to any physician on receipt of order.

THE NATIONAL BLANK CO.,

THE S. B. CHANDLER, SON & CO., Limited, Cincinnati, Ohio, U.S.A.

Selling Agents for Canada.

CHIONIA

THE HEPATIC STIMULANT

INDICATED IN
Diseases Caused by Hepatic Torpor.

Does not purge, per se, but under its use the Liver and Bowels gradually resume their normal functions.

DOSE—ONE TO TWO FLUID DRACHMS, THREE TIMES A DAY

PEACOCK'S BROMIDES

THE STANDARD SEDATIVE

INDICATED IN
Congestive, Convulsive and Reflex Neuroses

Absolutely uniform in purity and therapeutic power, produces clinical results which can not be obtained from the use of commercial bromide substitutes.

DOSE—ONE TO TWO FLUID DRACHMS, IN WATER, THREE TIMES PER DAY.

PEACOCK CHEMICAL COMPANY, St. Louis, Mo.
LYMAN KNOX & CO., Montreal and Toronto, General Agents for Canada

All Physicians

Know that, especially at this time of the year, it is most important that those who have weak chests and are susceptible to cold should be suitably protected. It is admitted on all sides that **FIBRE CHAMOIS** is par excellence the material for this purpose, it being impenetrable to wind or cold. : : : : : : : : : : : : : : : :
We wish to direct the attention of the medical profession to our

FIBRE CHAMOIS CHEST PROTECTORS

They will prove a boon to all who wear them, and the greatest source of comfort to subjects of Bronchitis and Winter Cough. : : : : : : : : : : : : : : : :
THEY ARE PROCURABLE AT ALL STORES.

Our Fibre Chamois Blankets are especially suitable for use in hospitals and public institutions. They are tough and last a long time with care.

WE ASK THE DOCTORS TO GIVE OUR GOODS A TRIAL, BEING CERTAIN THAT ONCE USED THEY WILL NEVER BE GIVEN UP.



The International Fibre Chamois Co.,
TORONTO AND MONTREAL LIMITED

See, in purchasing, that you get only THE GENUINE Fibre Chamois.

INSTITUT PASTEUR

PARIS-FRANCE

15, Rue Dutot, 15

ANTIDIPHThERIC SERUM

Directions for Use.

Antidiphtheric Serum is the blood Serum of horses which have been immunized against diphtheria. *It retains its curative properties for more than one year if the vial be kept in a cool, dark place without being withdrawn from its case. This Serum contains no antiseptic and can, if necessary, be injected in large quantities without inconvenience, it is therefore quite unnecessary to concentrate it, so as to obviate injecting large quantities.*

Preventive action.—Administered by dose of 5 to 10 c. c. the Serum furnishes temporary immunity against diphtheria, such immunity lasting from 4 to 6 weeks. Preventative injections can, therefore, be given to persons exposed to contagion. The preventive power of the Serum supplied by the Pasteur Institute of Paris is at least 50,000 units; that is to say, that if a guinea pig be given an injection of this Serum equal to 1-50,000th of its weight, it will support, without reaction, an amount of virus or toxine capable of killing a control guinea pig in less than 30 hours. An antidiphtheric Serum, therefore, corresponds approximately to that of a *Serum of 150 Ehrlich's immunizing units per cubic centimeter*, and consequently the vial of 10 c. c. contains 1,500 units; and the vial of 20 c. c. 3,000 units.

Therapeutic action.—This Serum, when injected in sufficient quantity, cures diphtheria provided always that the disease has not progressed too far. The required dose varies according to the severity of the disease and the stage which it has reached. Ten c. c. are sufficient if administered early in mild cases; but if the case is severe or has already run for several days, 15 to 20 c. c. will be required. Exceptionally there may be required as much as 30 c. c., and even more in very severe cases, notably in those where the disease has extended to the larynx and bronchial glands. To renew the injection, the physician must be guided by the course of the temperature and pulse, as well as the general condition of patient. So long as the rectal temperature remains above 100, the case cannot be considered convalescent. Usually the false membranes become detached within 24 to 36 hours after the injection of the Serum if the dose has been sufficient.

When a child exhibits dyspnoea, tracheotomy may often be avoided by injecting at once 15 to 23 c. c., followed after 12 hours by a further injection of from 10 to 20 c. c., if the improvement is not sufficiently marked. It is preferable to inject at the outset a fairly considerable dose of Serum capable of stopping the disease rather than to give small doses at intervals.

The bacteriological diagnosis of diphtheria ought always to be made, since it is the only means of knowing with certainty if it is justifiable to treat the case with Serum and to determine what disinfecting measures to prescribe. But the earlier the Serum treatment is employed the more efficacious it is, and the injection should not be delayed under the pretext of waiting the result of the bacteriological examination, especially if the case appears serious and the temperature is noticeably high. It is known, in fact, that Serum injected at an early stage prevents septic diphtheria, but that it is powerless when the disease has already assumed a septic character, as shown by paralysis and irregularities of respiration and pulse. If, notwithstanding the injection of Serum, these symptoms appear, it is because intervention was too late or that the dose administered was too small.

Occasional Unpleasant Symptoms.—Following injections of antidiphtheria Serum an urticaria eruption is frequently observed, which generally appears in the week following the commencement of the treatment. This eruption may be accompanied by a slight rise of temperature; it disappears without causing any noticeable discomfort. More rarely, indefinite eruptions (polymorphous erythemas), with febrile movement, occur. Exceptionally, especially when the false membranes contain streptococci as well as diphtheria bacilli, painful articular swellings accompany the eruption, and in this case the fever may be prolonged for several days. Adults are perhaps more subject than children to such feverish erythematous manifestations. They are all transitory and have never proved serious.

The antidiphtheric Serum is supplied in capsuled bottles of 10 and 20 c. c. bearing the label of the Pasteur Institut and the original mark.

Retail Price, 10 c. c. Vial,	-	-	\$0.85
“ “ 20 c. c. “	-	-	1.50

BY SPECIAL APPOINTMENT AGENTS FOR THE DOMINION.

ROYER & ROUGIER FRÈRES
55 ST. SULPICE STREET, MONTREAL.

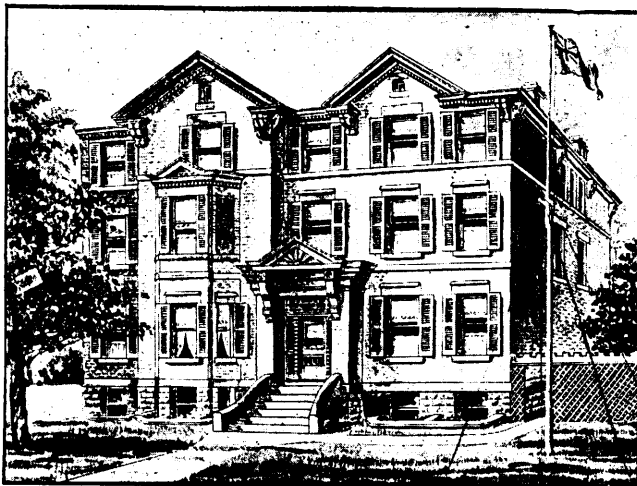
The Montague Private Hospital

159 BLOOR ST. EAST, TORONTO

TELEPHONE 3865

J. H. LOWE, M.D., - - Medical Superintendent

Formerly THE TORONTO NURSING HOME AND COTTAGE HOSPITAL, ON MONTAGUE PLACE.



The Management of this Institution beg to announce that they have now moved into new quarters at the above address.

The business hitherto carried on will be continued as follows :

Patients will be admitted for Surgical Operations, Confinements, Massage and all non-infectious diseases.

Patients may be attended by their own doctor, and his directions will be carefully carried out by trained nurses, the nurses being entirely responsible to the doctor in charge of the patient for the proper performance of his instructions.

Massage, etc., given without residence, if so wished.

Rheumatism treated by the new and successful superheated dry air method.

Both male and female patients will be received.

The charges for board and nursing will be from \$1.00 to \$2.00 per diem according to location of room, and payable weekly in advance. These prices have been placed at the lowest possible figure compatible with carrying on the Institution, and are not subject to modification.

All medical attendance, massage, treatment of every kind, extra.

The Montague Private Hospital is pleasantly situated, is on the Belt Line, and may also be reached by the Church Street Line of the Street Railway. It is made as comfortable and home-like as possible.

All further information may be obtained on application to DR. LOWE, or to the Lady Superintendent, Miss DOVER (Graduate Toronto Training School) at the above address, or to the Secretary of the Company,

ROOMS 81 AND 82 CANADA LIFE BUILDING, TORONTO. Telephone 2024

The Montague Private Hospital Company, of Toronto
(LIMITED).

When writing advertisers, please mention THE CANADIAN JOURNAL OF MEDICINE AND SURGERY.

The Trusts Corporation of Ontario



OFFICES AND SAFE DEPOSIT VAULTS:

BANK OF COMMERCE BUILDING
KING STREET WEST
 TORONTO, ONT.

Capital Subscribed :
\$1,000,000



President :

Hon. J. C. AIKINS, P.C.,
 Toronto.

Vice-Presidents :

Hon. S. C. WOOD, Toronto.
 W. D. MATTHEWS, Esq., Toronto.



This Company acts as **Administrator** in the case of intestacy, or with will annexed, **Executor, Trustee, Receiver, Committee of Lunatic, Guardian, Liquidator, Assignee,** etc., etc., also as **Agent** for the above offices.

All manner of Trusts accepted; Moneys invested; Estates managed; Rents, Income, etc., collected.

Bonds, Debentures, etc., issued and countersigned.

Deposit Safes to rent, all sizes.

Parcels received for safe custody.

Solicitors placing business with the Corporation are retained in the professional care of same.

A. E. PLUMMER, Manager.



PHYSICIANS do not require to be told that the only hygienic method of administering the Sacrament is by the use of

INDIVIDUAL CUPS,

one being supplied to each and every person taking part in the celebration. Send for Illustrated Catalogue of Individual Cup Communion Service to

THE LEPAGE DOOR CHECK MANUFACTURING CO.

25 CUNNINGHAM AVENUE, TORONTO

Frederick Stearns & Co.

MANUFACTURING
PHARMACISTS

LONDON, ENG.
NEW YORK CITY.

WINDSOR, ONT.

MAIN OFFICE AND LABORATORY: DETROIT, MICH., U.S.A.

IN ADDITION to offering complete lines of the standard pharmaceutical preparations (catalogues on application), we desire to call to the attention of the medical profession the following special products of our own devising and manufacture:

KASAGRA, A Laxative and Intestinal Tonic.

The original and genuine *Cascara Aromatic*, and the only full strength fluid extract of *Cascara Sagrada* which is not bitter and which does not gripe.

WINE OF COD LIVER OIL

A Nutrient Reconstructive Tonic, containing the valuable active medicinal principles of the oil without its fatty matter.

TRITIPALM

A Demulcent Diuretic and Genito-Urinary Tonic; being a concentrated, compound fluid extract of fresh *Saw Palmetto* and *Triticum*.

DIASTASE-STEARN'S

A Starch Digestant. The isolated amylolytic ferment of the pancreatic juice, in powder, pilloid and essence form.

KOLA-STEARN'S

A Brain, Nerve and Muscle Stimulant. An aromatized, palatable fluid extract of fresh (undried) true African Kola.

HÆMOFERRUM

A True Hematinic; A Natural Proteid Compound of Iron, being non-constipating and non-irritating. In pilloid and liquid form.

Complete sets of literature on any or all of the above preparations will gladly be mailed on request.

THE NEW ANTISEPTIC OINTMENT



STYRA-PHENOL

Can be had from your Wholesale Druggist

in ½, 1, 2, 4, and 8 oz. Pots.

EVANS & SONS

WHOLESALE CHEMISTS.

Canadian Agents.

A Simple and Convincing Test.

Take two test tubes. Pour into one a small quantity of Parke, Davis & Co.'s ERGOT ASEPTIC; into the other, an equal quantity of any one of the ordinary preparations of Ergot on the market. Add to each from three to five volumes of alcohol. Parke, Davis & Co.'s ERGOT ASEPTIC remains clear; the other is precipitated. This precipitate consists of extractive matter and ergotinic acid, both of which are very objectionable in ergot preparations intended for hypodermatic administration.

Extractive matter is inert, and causes abscesses. Ergotinic acid is a nerve depressant and irritant.

Aside from being entirely free from both extractive matter and ergotinic acid, Parke, Davis & Co.'s ERGOT ASEPTIC is physiologically tested and standardized. Hermetically sealed glass bulbs exclude all germs or other contaminating substances. It is entirely free from both acid and alkali. No alcohol, glycerin, salicylic acid, or other preservative is added which might prove irritating. Each bulb contains one cubic centimeter, representing two grammes of standard Ergot. Every bulb is sterilized, and the total absence of bacteria is evidenced by the fluid remaining limpid. "It is very rapid and powerful in its effects, producing strong uterine contractions within a surprisingly short time."

LITERATURE UPON REQUEST.

Parke, Davis & Company,

Walkerville, Ont.

A Very Serious Handicap!



In the sixth edition of Prof. Hare's "Practical Therapeutics" the author remarks *a propos* of Cannabis Indica :: ::

"The employment of this most valuable remedy is handicapped by its frequent lack of power—a fault which is largely dependent upon its preparation. The drug as prepared by Parke, Davis & Co. has proved efficacious in the author's hands for a number of years. The physician should always employ some preparation known by him to be active by personal trial before condemning the drug in a given case."

Every parcel of our Fluid Extract Cannabis Indica is subjected to searching physiological test, and is adjusted to our established standard of activity.

Parke, Davis & Company,

Walkerville, Ontario.

An Antiseptic Wonder

The Waugh-Abbott Intestinal Antiseptic has grown out of Dr. Waugh's work with the sulphocarbolates, and is now presented to the profession with the assurance that it meets all the indications for an antiseptic of the alimentary canal safely, surely and pleasantly.

The Waugh-Abbott Intestinal Antiseptic is a mixture of chemically pure sulphocarbolates of lime, soda and zinc, especially made by a process that eliminates all the hitherto objectional properties of the sulphocarbolates and has been found much more satisfactory than either salt alone. It is indicated in all fermentative conditions, and their name is legion.

It has no equal as an antiseptic in fermentative dyspepsia, diarrhoea, dysentery, cholera morbus, cholera infantum, the green stool of nursing babies, flatulence, sour stomach from fermentation and all conditions allied to the above. It is practically a specific in typhoid fever when backed up by proper supporting measures.

The Waugh-Abbott Intestinal Antiseptic should, as a general rule, be used in connection with strychnine arseniate and eliminative doses of Abbott's Saline Laxative.

Price, per 100, 40c.; 500, \$1.90; 1000, \$3.75; direct or through the regular channels of trade. Sample and literature on request.

THE ABBOTT ALKALOIDAL CO., Chicago

CANADIAN AGENTS:
THE S. B. CHANDLER, SON & CO., Limited,
TORONTO.



*A highly magnified view of a drop of
Unfiltered Water*

If you drink ❀ ❀

Unfiltered Water

You absorb into your system animalculæ, microbes, dirt, and impurities of every description. Avoid this by using

“Success” Filter

Which absolutely removes these foreign substances and makes the water

Germ Proof and Clear as Crystal.

RICE LEWIS & SON

(LIMITED)

Cor. King and Victoria Streets - TORONTO

The Provincial Trust Company of Ontario

LIMITED

AUTHORIZED CAPITAL

\$1,000,000



Offices:

McKINNON BUILDING, TORONTO

BOARD OF DIRECTORS.

President:

SIR RICHARD CARTWRIGHT, G.C.M.G., P.C., Minister of Trade and Commerce.

1st Vice-President:

S. F. McKINNON, Esquire,

Of S. F. McKinnon & Co., Vice-President Manufacturers' Life Insurance Company, and Director of the British America Assurance Company.

JOHN R. BARBER, Esq., M.P.P.,

President of the Toronto Paper Co., Georgetown.

G. STERLING RYERSON, M.D., F.R.C.S., Toronto.

REV. D. C. HOSSACK, Toronto.

HENRY SUTHERLAND, Esq.,

Managing Director the Temperance and General Life Assurance Company, Toronto.

R. MILLICHAMP, Esq.,

Of Millichamp, Coyle & Co., Wholesale Merchants, Toronto.

J. ORLANDO ORR, M.D., Toronto.

ALEXANDER FRASER, Esq.,

Of Magann & Fraser, Contractors, Toronto.

A. T. WOOD, Esq., M.P., Hamilton.

2nd Vice-President:

JAMES SCOTT, Esquire,

Vice-President of the Georgian Bay Lumber Company and Director of the Standard Bank, Toronto.

JOHN MACLAREN, Esq.,

Manufacturer and Lumberman, Brockville, Ont.

ROBERT BEITH, Esq., M.P., Bowmanville, Ont.

D. B. McLENNAN, Esq., Q.C., Cornwall, Ont.

HENRY K. EGAN, Esq.,

Vice-President Hawkesbury Lumber Company, Ottawa.

DR. J. H. WIDDIFIELD, Sheriff County of York, Toronto.

ALEXANDER BRUCE, Esq., Q.C.,

Of Bruce, Burton & Bruce, Barristers, Hamilton.

JOHN KNOX, Esq.,

Of Knox, Morgan & Co., Wholesale Merchants, Hamilton.

JOS. N. SHENSTONE, Esq.,

Secretary-Treasurer Massey-Harris Company, Toronto.

Manager: WILLIAM BEITH.

This Company is authorized by law to receive and execute Trusts of every character from Courts, Corporations and individuals. Acts as Executor, Administrator, Trustee, Guardian, Committee, Receiver, etc.

The Company also acts as agent for any person holding any of the above offices, and for all kinds of financial business, including the issue and countersigning of bonds and debentures, collection of rents, income, etc.; the management and winding up of estates, partnerships, etc.; investment of money, etc.

Solicitors placing business in the hands of the Company will be retained in the professional care thereof.

Correspondence and Personal Interviews Invited.

"Those Foods which require the addition of fresh cow's milk are naturally better than those which are not to be mixed with milk." L. Emmett Holt.

Fresh Cow's Milk Must be Added to

ESKAY'S Albumenized FOOD

The resulting mixture is cow's milk so modified as to resemble mother's milk as near as any artificial food can approach it. The casein does not form in curds in the child's stomach as in cow's milk, but is rendered softer and more pulverulent and digestible. **Eskay's Food is retained by the weakest and most delicate stomach in Infants and Invalids.**

FREE SAMPLES AND FULL LITERATURE ON APPLICATION TO
SMITH, KLINE & FRENCH CO., Manufacturers, Philadelphia.

A LIFE BUOY

Pabst Malt Extract, The "Best Tonic," is a combination of stimulating and nourishing substances produced by a pure fermentation of the natural ingredients of malt and hops. The fermentation is conducted absolutely free from any foreign organisms, disease germs, etc., under scientific supervision, and according to the modern principles of bacteriology.

The Tonic Department of the Pabst Brewing Co. is always open to the inspection of physicians.

Pabst Malt Extract
The "Best Tonic"

STODDART'S

Patented Veneered SURGICAL SPLINTS

These splints mark a great advance in the use of scientific appliances in surgery and fill a want long felt by every surgeon.

They consist of sixty-six pieces, each moulded to fit perfectly some part of the body and provide a splint for every kind of fracture or dislocation, thus covering the entire range of surgical fractures.

Every objection to the splints heretofore in use has been overcome by the "Stoddart's Patented Veneered Surgical Splints," which are stronger, lighter and cheaper than any splints now upon the market. The "Stoddart's Patented Veneered Surgical Splints" weigh but one-half that of any others, and are equally as strong. This renders them applicable in many cases of severe sprain or dislocation, where a heavier splint could not be used or would be exceedingly uncomfortable. Their very low price allows of their being used indiscriminately by the surgeon, who formerly was obliged to make his own splints.

In the production of the "Patented Veneered Surgical Splints," we have demonstrated that it is not necessary to weigh splints down with heavy or cumbersome metallic, wood or felt splints, but that a light splint, equally as strong as any of these, may be used.

In placing these splints before the profession we would call particular attention to the following points of excellence: they may be cut and shaped with a pocket knife; they are pliable and therefore require very little padding; they will not warp, are aseptic, waterproof, and, notwithstanding their lightness, meet fully all requirements as to strength.

We are satisfied that the "Stoddart's Patented Veneered Surgical Splints" will fill a great want in surgery, and that progressive physicians and surgeons will give them a most hearty welcome.

Sole Agents for Canada—

A. HAMILTON & CO., Druggists

HAMILTON, ONT.

It has long ago been admitted

By the Medical Profession that the remedy par excellence for reducing the heart's action without diminishing its fullness and strength, at the same time causing a dry, harsh skin to become moist and cool, is **VERATRUM VIRIDE**. Of this valuable therapeutical agent there are many (so-called) on the market, some so manufactured as to be almost noxious in action, causing severe nausea and vomiting, with well-nigh symptoms of collapse, and in nervous or hysterical persons a sensation of strangling and difficult breathing, which greatly alarms the friends and frequently even the physician in attendance.

The Original Veratrum Viride

Was manufactured for years by Dr. W. C. Norwood, of Mount Lebanon, Columbia County, N. Y., and is still to be procured. The medical profession may depend upon Norwood's Veratrum Viride being constant in action, and will be found to be invaluable in all febrile conditions, controlling and regulating the action of the heart and arteries.

To an adult male the proper dose is five drops, the dose to be increased by one drop administered at the end of every third hour, till the pulse is reduced to 65 beats per minute. When that stage has been reached, it is a simple matter to keep the heart's action down to that number without causing any nausea or vomiting.

Norwood's Original Veratrum Viride is the only agent that will render the pulse rate slower in health than natural and not diminish its fullness and strength. It never renders a pulse weak in health or disease, except when given in doses sufficiently large to nauseate. After use by Dr. Norwood for 36 years, he confidently says that his Veratrum Viride is destitute of all poisonous effects in any dose, however large or small.

Dr. Norwood was awarded a gold medal by the United States Medical Society.

The Canadian profession are invited to try this preparation. It can be procured through the trade or direct from

ROBERT HALFORD,

Mount Lebanon, Columbia Co.,

NEW YORK.

"NORWOOD" is blown into every bottle containing the preparation

BETHESDA

When taken with the proper diet has never failed to benefit a case of either

DIABETES
or
ALBUMINURIA,

and it will usually effect a cure, the exceptions being where the diseases are in the last stages.

MICHIE & CO.
Selling Agents
TORONTO

Send for Pamphlet.



HAYDEN'S VIBURNUM COMPOUND

The STANDARD REMEDY in the ailments of women in the United States. Perfectly safe in any and all cases. Prescribed and endorsed by more medical men than any one other special remedy in the world.

**THE NEW YORK
PHARMACEUTICAL COMPANY**

BEDFORD SPRINGS, MASS.

Send for hand-book, free.

Physicians Know

that in cases of convalescence from illness, it is ALL IMPORTANT that the patient be given a

**PERFECTLY PURE
WELL-MATURED WINE**

which at the same time is easily assimilated and digested.

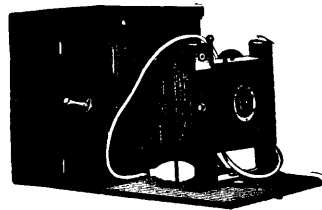
We wish to notify the Canadian Medical Profession that our Wine is specially adapted for use by such patients, and we ask the doctors to use it and recommend it to their clients.

Our wines sell at very low prices consistent with quality. We manufacture

**PORT, RODGER, DELAWARE
and CATAWBA WINES**

and will be pleased to send a sample to any physician requesting the same.

The Toronto Wine Co.
27 FRONT ST. WEST, TORONTO
WM. McBEAN, Manager.



**Members of the
Medical Profession**

WHO TAKE AN INTEREST IN

Amateur • Photography

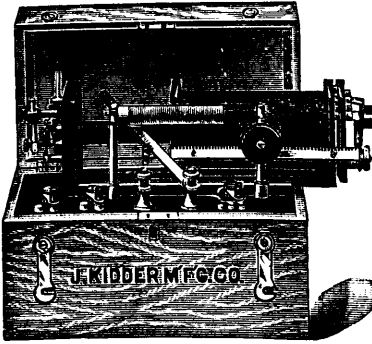
Will find our house the place for
Photographic Supplies.

**WE KEEP EVERYTHING IN THAT LINE, AND
OUR PRICES ARE RIGHT**

Sharpe, Eakins & Ferris
90 BAY STREET

'PHONE 2079

Toronto




Progress in the Development of Science

ELECTRICITY THE ADVANCING THERAPEUTIC AGENT

Our Improved High Tension Apparatus producing phenomenal sedative effects when applied to living tissue.
GALVANIC BATTERIES, used for the production of the direct current, Galvanism, Cataphoresis, Diagnostic Lamps, to supply energy for large induction coils where necessary.
FARADIC APPARATUS of great length of wire, producing superior electrical effects.
CABINETS, CONTROLLERS, ELECTRO-CAUTERY APPARATUS, Instruments in great variety, **MILLIAMPEREMETERS** of guaranteed accuracy, **SWITCH-BOARDS, BATH WORK, KEY BOARDS, WALL BRACKETS**, etc. Everything for the equipping of the electro-therapeutist. A certificate guaranteeing the length of wire in our faradic apparatus.
Promoters and Purveyors to the Medical Profession.
 Established upwards of a half a century. Reprints free if this Journal is mentioned.

JEROME KIDDER MFG. CO., 820 Broadway, New York, N.Y.

<p>HEALTH</p> <p>'RICE'S'</p> <p>is the Best Salt made for Domestic Purposes. Every Package Guaranteed PURE.</p> <p>HEALTH</p>	<p>"The Salt of the Earth"</p> <p>'RICE'S'</p> <p>PURE SALT</p> <p>For Sale at all First-Class Grocers.</p> <p>SOLE MANUFACTURERS: THE NORTH AMERICAN CHEMICAL CO., Ltd. Goderich, Ont.</p>	<p>HEALTH</p> <p>Physicians can safely recom- mend 'RICE'S' —it will not cake or harden in damp weather like other salt, and costs no more Money.</p> <p>HEALTH</p>
---	--	---



8 CHILDREN

Extract from Letter, 4th January, 1895, from Mr. A. J. Page, 28 Abbey Street, Greenheys, Manchester:

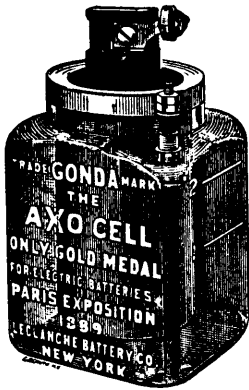
"We have lately had an addition to the household and the little stranger not being satisfied with her usual diet, we fell back upon our old and infallible substitute, **ROBINSON'S PATENT BARLEY**, with the result we have found in bringing up 7 before on the same, that we were fully justified in making the change."

KEEN, ROBINSON & CO., Limited, London,

MAKERS OF
KEEN'S MUSTARD AND ROBINSON'S PATENT GROATS

FREE SAMPLES TO DOCTORS AND THEIR PATIENTS

Apply **FRANK MAGOR & CO., 16 St. John Street, Montreal.**



The only Battery which Generates the Proper Current for Medical Treatment.

**CLEAN! DURABLE!
HIGHLY EFFICIENT!**

Whatever make of Instruments you use, insist upon the Axo Cells being furnished with them.

The current given off by this Cell is of remarkable value in electro-medical treatment. As a therapeutic agent, it possesses an efficiency altogether unique and peculiar to itself, and which is not attainable from any other known electrical source. As a Stationary Battery for office practice it has no equal in the world. Always ready for work without trouble or preparation.

THE LECLANCHE BATTERY CO.
111 to 117 E. 131st Street, NEW YORK

Advisable always to have a supply in the house.



THE IDEAL TONIC

Fortifies

Nourishes

Stimulates

Refreshes



**BODY
AND
BRAIN**



"I have much pleasure in stating that I have used the VIN MARIANI for many years. I consider it a valuable stimulant."
MORELL MACKENZIE, M.D., London.

Endorsed by eminent physicians everywhere. Used in Hospitals, Public and Religious Institutions. Sold by Druggists and Fancy Grocers. MAILED FREE, album of autographs of celebrities, by

LAWRENCE A. WILSON & CO.
Sole Agents for Canada. MONTREAL



**Eagle
Brand**

**Condensed Milk
HAS NO EQUAL AS
AN INFANT FOOD.**

**"INFANT HEALTH" SENT
FREE ON APPLICATION.**
NEW YORK CONDENSED MILK CO. N.Y.



The "**CHAMPION**" and "**MONITOR**" Hydraulic Automatic-Working Air Compressors Receivers, Pressure Regulators, and complete atomization outfits. If you want an absolutely reliable, noiseless and up-to-date outfit, write for catalogue, prices and information to **AUGUSTE BOLTÉ, 47 Colborne Street, Toronto, Ont.** Sole dealer in the Dominion for The Cleveland Faucet Co.'s famous Air Compressors.



Put up in Quarts, 50 Bottles to the Case. Pints, 100 Bottles to the Case.
Half-Pints, 100 Bottles to the Case.

SOLE DEALER . . .

AUGUSTE BOLTÉ, 47 Colborne St., TORONTO

When writing advertisers, please mention THE CANADIAN JOURNAL OF MEDICINE AND SURGERY.



FLORIDA OF THE NORTH. REST FROM SNOW AND ICE.

Hotel Traymore

ATLANTIC CITY, N. J.

HOTEL TRAYMORE,
ATLANTIC CITY, N. J.



MODERN AND COMPLETE IN EVERY DETAIL



RATES the very lowest consistent with first-class service. The Traymore is one of the longest established beach front hotels in Atlantic City. Home-like and cheerful, and enjoys the continued patronage of a quiet and refined class of visitors. Write for all information.

D. S. WHITE, JR., Owner and Proprietor.



JOSH C. MOOR

Direct
Importer

• • Wine and Spirit Merchant

Very old Malaga and Marsala Wines. Highly recommended for invalids.

Specially old and fully matured Port and Sherry Wines. (Vintage 1860.) Sir R. Burnett's world-renowned Orange Bitters.

PURE OLD BRANDIES AND WHISKIES FOR MEDICINAL USE

N. Johnston & Sons' Celebrated Clarets and Sauternes, the most reliable and popular, bottled by themselves in the best condition, in Bordeaux, and imported direct at first cost. A full assortment in quarts and pints.

Chablis', Beaune and Macon Burgundies. • • • Bott's Malt Stout.

All orders from the country promptly attended to.

TELEPHONE 625

433 YONGE STREET, TORONTO, ONT.

MICHIGAN COLLEGE OF MEDICINE AND SURGERY

Regular Winter Session Opens
September 21st, 1898.

FACULTY.—Hal C. Wyman, M.D., Surgery; L. E. Maire, M.D., Ophthalmology and Otolaryngology; Dayton Parker, M.D., Gynecology; Wm. I. Hamlen, M.D., Chemistry; Willard Chaney, M.D., Laryngology, Rhinology and Hygiene; W. R. Scurr, M.D., Neurology and Diseases of the Mind; M. V. Meddough, M.D., Physiology; Arthur D. Holmes, M.D., Diseases of Children; Frank T. Lodge, A.M., Medical Jurisprudence; Wm. C. Stevens, M.D., Obstetrics; J. A. Weitz, M.D., General Pathology; J. A. Patton, M.D., Materia Medica and Therapeutics; Wm. A. Hackett, M.B., M.C.P.S., Dermatology; R. S. Linn, M.D., Bacteriology and Microscopy; A. K. Northrop, M.D., Bacteriology; Walter J. Cree, M.D., Practice of Medicine; W. E. Scribner, M.D., Anatomy.

The course of study required extends over four years. The work is graded. All clinics are held at the Detroit Emergency Hospital and Free Dispensary. Practical clinical and laboratory work is required of all.

FEES.—Matriculation, annually, \$5; Lectures, each term, \$50; Anatomy, dissecting, second and third courses, \$10 each; Chemistry, first course, \$10, second course, \$5; Graduation fee, \$25; Practitioners' course, all departments, \$50; single department, \$25. Optional course: Experimental Therapeutics, \$10; Physiological Laboratory, \$10; Surgical Laboratory, \$10. For further particulars address

Michigan College of Medicine & Surgery
7 and 9 PORTER ST., DETROIT, MICHIGAN.

THE JOHN BULL

MALT

DIGESTIVE BREAD

Is declared by all leading authorities to be the most easily assimilated and digested bread manufactured.

The **Medical Profession** will find it invaluable in many cases, and **are requested to give it a trial**. The following authorities will prove what I say:

The Lancet, London, Eng.—"The flavor is of special excellence, although somewhat sweet, resembling in this respect malt."

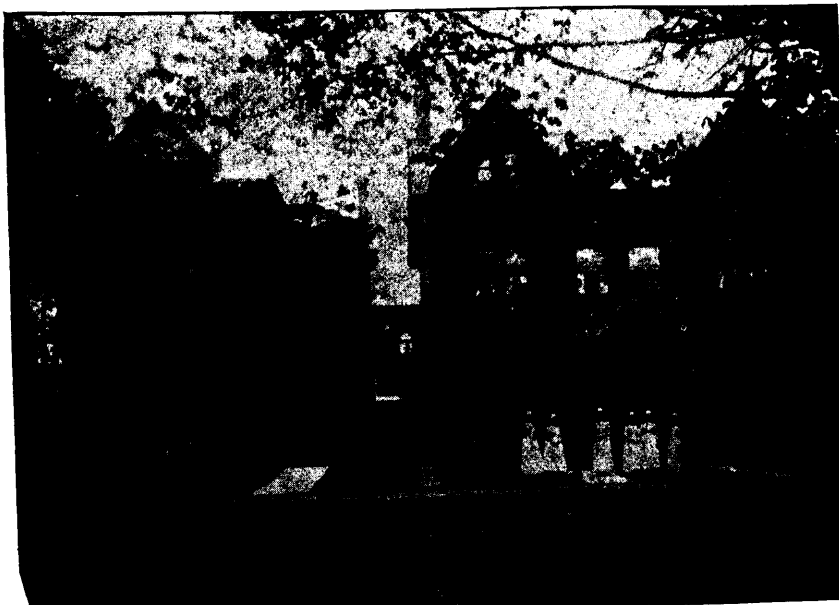
Sir Charles O. Cameron, M.D., etc.—"It is well flavored, nutritious and easily digested. I have determined to have it on my own breakfast table."

My Home Made and Whole Wheaten Bread are the best on the market, all my goods being made of the finest and purest ingredients only.

WILLIAM GRAY

320 College Street, - - - TORONTO

When writing advertisers, please mention THE CANADIAN JOURNAL OF MEDICINE AND SURGERY.



HOLFORD WALKER, M.D

AT HOME 10 TILL 1

ROTHERHAM HOUSE

54, 56 and 58 Isabella Street
TORONTO

A Private Hospital for Diseases of the Nervous System (both sexes), Surgical and other Diseases of Women, Rheumatism and Heart Disease.



TERMS—\$12.00 and upwards per week, according to room—Semi-Private (two in a room) at Reduced Rates. These terms include Medical Attendance, Nursing and Board.

TERMS FOR SURGICAL AND ELECTROLYTIC CASES—Depend on extent of operation, or form and frequency of Electrolytic Applications.

EXTRAS—Baths, Massage, Statical Electricity, Washing and Prescriptions. Patients occupying a room at \$17.50 and upwards per week are entitled to the use of the Private Drawing Room.

THE VARIOUS BATHS TO BE OBTAINED IN THE INSTITUTION CONSIST OF :

The Nauheim or Schott Bath, in conjunction with the exercises for the treatment of the various forms of Heart Disease.

The Dry Superheated Air Cylinder Treatment for Rheumatism (acute or chronic), Rheumatoid Arthritis, Sciatica, Lumbago and Gout.

The Salt Rub Bath so effectual in cases of nervous prostration.

These Baths may also be obtained by non-resident patients.

Trained Nurses for General Nursing, Masseuses for Massage can be obtained on application. Also, a Masseur for the administration of Massage to Men.

A Pure Grape Brandy



is acknowledged to be the best alcoholic stimulant and tonic, but most physicians are in doubt as to how to obtain pure Brandy in these days of adulterations and therefore are reluctant to prescribe it.

As to the merits of alcoholic stimulants, you are aware that while in whiskey the character and flavor is given by the **AMYL ALCOHOL** (fusel oil) and its compounds, the product of distillation of grain, in brandy the distinguishing characteristics are numerous **ETHERS**, simple and compound, so subtle that we can isolate and define but few of them, nature's synthetical powers defying the analytical methods of the laboratory. These **ETHERS** possess not only the simple stimulating properties of alcohol, but are also **NERVE FOOD**, gentle and far-reaching in character, and capable of sustaining life in feeble persons, supplying them with all the **NUTRIMENT** of wine (a concentrated essence of which it is), without overloading the stomach.

Such a Brandy is **WALDEN COGNAC**, distilled from the choicest pure grape wines at Geyser Peak Vineyards, Sonoma County, Cal., aged and bottled by us, the distillers. It is used not only throughout the United States but in Germany, Professor Sell, of the German Imperial Sanitary Commission, pronouncing it one of the purest brandies he ever analyzed. Physicians, on written application to us, will be sent copy of certificate of analysis.

WALDEN & CO., 41 Beaver Street, New York City.
EASTERN OFFICE:

BENGER'S FOOD

(REGISTERED)

FOR INFANTS, INVALIDS AND THE AGED

Gold Medal Awarded, Health Exhibition, London, 1884; Highest Award International Exhibition, Adelaide, 1887.
The following letter is published by special permission of the Russian Court:

SIRS.—Please forward to **BALMORAL CASTLE** one dozen 2s. 6d. tins of Benger's Food for H.M. the EMPRESS OF RUSSIA, addressed to Miss Coster. We have received the box ordered from Peterhoff.
BALMORAL CASTLE, SCOTLAND, 25th Sept., 1896.
To Messrs. F. B. Benger and Co., Limited. Yours truly, F. COSTER.

OPINIONS OF THE MEDICAL PRESS:

"Mr. Benger's admirable preparations."—*The Lancet*.
"Benger's preparations have deservedly a very high reputation, and are all largely used."—*The Medic. Times and Gazette*.
"Deserving of the highest praise."—*The Practitioner*.

"Benger's Food has by its excellence established a reputation of its own."
"We have given it in very many cases with the most marked benefit, patients frequently retaining it after every other food has been rejected."—*The London Medical Record*.

BENGER'S FOOD may be obtained in tins of Chemists, &c., everywhere.

Wholesale of **EVANS & SONS, LIMITED, MONTREAL,** and Leading Importers.

THE BABY'S DIGESTION

It is the source of most of its troubles. A little baby is mainly a small machine for the transformation of food into flesh. If the chief concern is in getting a palatable food that will digest easily. It's easy to get if you start right. Start with

RIDGE'S FOOD

It is a complete diet in itself. It does not depend on milk to make it nutritious. It has to be prepared, but the results are always good. It has no effect on the bowels—neither laxative nor astringent. It is merely a food, but it is the best food. It digests easily, is readily assimilable and makes sound, healthy flesh. If you are not familiar with it we will be glad to send you a sample can with some literature.

WOOLRICH & CO., Palmer, Mass.

PHYSICIANS

WILL
FIND
IN . .

**CHRISTIE'S
INFANT
FOOD**

a very nourishing and easily assimilated form of diet for those children whose stomach seems to have resisted everything else. It is perfectly pure, as shown by the following analysis of Dr. W. H. Ellis:

Albuminoids, soluble	1.56
" insoluble	7.17
Starch	54.23
Sugar	20.00
Dextrin	11.44
Fat	2.50
Moisture	1.76
Ash	1.34
	100.00

CHRISTIE'S INFANT FOOD is so moderate in price that those unable to purchase the foods ordinarily advertised will find this **just as good and half the price.** Medical men will be pleased with the results. To be procured at all Drug Stores at 25c. per tin.

**Replating
Surgical
Instruments**



We make a specialty of this work, and can guarantee the highest class of workmanship on any articles sent to us.



Standard Silver Co.,

LIMITED.

31-43 Hayter Street,

TORONTO

DOCTORS,

Here are a few reasons why you should Prescribe

**"Alpha"
Rubber
Goods**

1. Because they are made in Canada.
2. Because you do not have to pay duty.
3. Because we make the best.
4. Because we guarantee them.
5. Because they are cheapest, especially in the end.

Our Goods are Styled Alpha, Omega, Diamond, etc.

CANADIAN RUBBER CO. Alpha Branch
MONTREAL, TORONTO, WINNIPEG.

Chloroform

Duncan's S.G. 1497,
From Pure Alcohol
From Methylated Alcohol
ABSOLUTELY PURE.

Duncan's S.G. 1490,
Containing about
one per cent. of
Alcohol. : : :

We now supply Chloroform containing about 1 per cent. of Alcohol, and having a specific gravity of 1490. While this minute addition of Alcohol has, of course, no effect in diminishing the anæsthetic power, it renders the chloroform

Practically Non-Decomposable under any Circumstances.

In Ordering this Variety, please say :—Chloroform Pure (Duncan's S.G. 1490).

Chloroform Meth. (Duncan's S.G. 1490).

N.B.—We can only guarantee Chloroform to be of our manufacture when it is supplied in bottles bearing our label, and having the stoppers sealed with one of our trade mark Straps. Our Chloroform is put up in

1 oz., 2 oz., ¼, ½, 1, 2, 4 and 7 lb. Bottles,

and may be ordered through any Wholesale Drug House in Canada.

Duncan, Flockhart & Co.,
Manufacturing Chemists,
Edinburgh
Physicians should avoid substitution by prescribing original packages.

CHLORIDE OF SILVER DRY CELL BATTERIES

**GALVANIC,
FARADIC,**



**COMBINED
(GALVANIC
and FARADIC)**

These batteries are recommended for their compactness and portability, cleanliness, convenience and rapidity of action, constant and uniform current, and cheapness in use.

CANADIAN AGENTS :
LYMAN SONS & CO., 380-386 St. Paul Street, MONTREAL, P.Q.

When writing advertisers, please mention THE CANADIAN JOURNAL OF MEDICINE AND SURGERY.

F. Alfred Reichardt & Co.

OLDEST WHOLESALE SURGICAL INSTRUMENT

HOUSE IN THE UNITED STATES

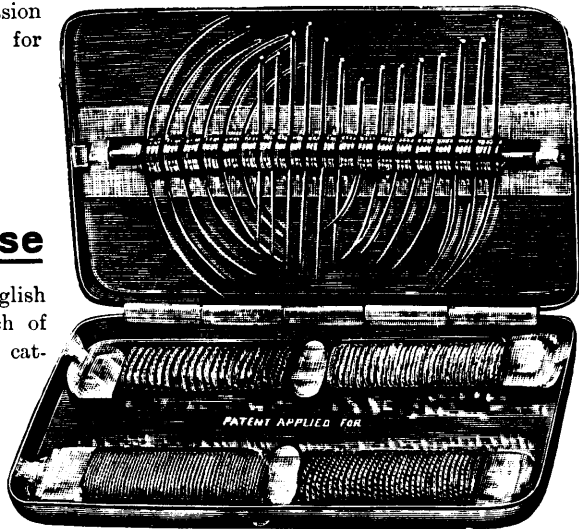
Offer for sale to the Medical Profession
a line of Superior Instruments for
cash.

Aluminum Vest-Pocket Needle Case

Containing 2 Dozen Finest English
Surgeons' Needles, 2 Spools each of
finest quality sterilized silk and cat-
gut. Case and Springs, all metal.
Can be sterilized dry.

Price, \$1.50

SENT BY MAIL ON RECEIPT OF PRICE



WE ARE THE ORIGINAL MANUFACTURERS OF

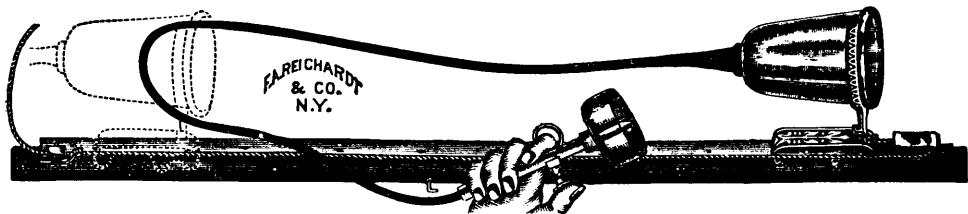
Dr. Ferd. C. Valentine's Apparatus

DEvised BY HIM FOR INTRAVESICAL IRRIGATION FOR
THE SPEEDY AND PERFECT CURE OF GONORRHOEA

GOLDBERG shows irrigation to be positively curative within one to two weeks for
90% of all cases.

The Apparatus is supplied with the latest improvements: Sliding Clamp, Clamp
Stop-cock, Glass or Metal Shield, with Stationary Bracket.

Price, \$5.00. With Sliding Bronze Bracket, \$6.50.



Beware of imitations. Apparatus packed for shipment weighs about eleven to twelve
pounds, and cannot be sent by mail.

Write for reprint of Dr. Valentine's article on Irrigation, and circular.

F. ALFRED REICHARDT & CO.

Quotations on all Surgical Instruments cheerfully given.

NEW YORK CITY, N.Y.

JOHN LABATT'S LONDON ALE AND PORTER

WHAT YOUR CONFRERES STATE:

"LABATT'S INDIA PALE ALE (LONDON, ONT.) is an excellent nutrient tonic. Physicians desiring to prescribe such will hardly find anything superior to this."—HEALTH JOURNAL.

"We find that the ale uniformly well agreed with the patients, that it stimulated the appetite and thereby increased nutrition. The taste likewise was always highly spoken of. In nervous women we found that a glass at bedtime acted as a very effective and harmless hypnotic."—SUPERINTENDENT OF LARGE UNITED STATES HOSPITAL.

"I find them to be remarkably sound ales, brewed from pure malt and hops."—JOHN BAKER EDWARDS.

"I find it to be perfectly sound, containing no acetic acids, impurities or adulterations."—HENRY W. CROFT.

SIMILAR TESTIMONIALS FROM
MANY OTHERS.

THE MOST WHOLESOME OF
BEVERAGES.

MACKAY'S KOLA CAFÉ

THE essence of the finest
Coffee and Chicory,
together with all the in-
vigorating properties of the
African kola nut.

*A Pleasant and Stimulating Beverage.
No Trouble to Prepare.*

Bottles, 25c. and 45c.

Sold by best Grocers.

ROBERT GREIG & CO.
MONTREAL

Canadian Agents.

HUBBARD'S RUSKS.



The *Lancet* says.

On examination these Rusks proved to contain both carbohydrates and nitrogenous constituents in an easily assimilable form. This is due partly to the selection of superior materials, and partly to care devoted to the cooking process.

The Rusks are almost entirely dissolved during the process of mastication, a fact which affords distinct evidence of their easily digestible property.

PACKED IN
TINS

1 lb, 2 lb, 4 lb

A little Frenchman, 22 months old.

Wholesale Agents for Canada:

ROBERT GREIG & CO.

456 St. Paul St.,

MONTREAL

When writing advertisers, please mention THE CANADIAN JOURNAL OF MEDICINE AND SURGERY.

CHICAGO POLICLINIC AND HOSPITAL

A CLINICAL SCHOOL FOR PRACTITIONERS OF MEDICINE

THE Regular Annual Special Course in Surgery, Gynecology and Dermatology, Genito-Urinary, Orthopedic and Venereal Diseases included, will be given, commencing April 11th, 1898, and continuing three weeks. Instruction in this course will be entirely Clinical and eminently practical.

In addition, Special Operative work in Surgery and Gynecology will be demonstrated on the cadaver. Physicians may enter at any time for other courses, since instruction is continuous throughout the year. Unequaled Hospital facilities, abundance of Clinical material, excellent advantages for Laboratory work, Practical Anatomy and Operative Surgery.

For the Announcement or other information, address—

DR. F. HENROTIN, Secy., 176 East Chicago Ave., CHICAGO, ILL.

... TO PHYSICIANS ...

The Toronto Electric Light Co., Limited

having reduced their rates for Electric Lighting, as applied to dwelling-houses, are prepared to make this **special discount apply to physicians** having their office and residence combined, in case they desire to install the light throughout. It is unnecessary to call the attention of medical men to the superior safety and hygienic qualities of the Electric Light, as this point is sufficiently well known to members of the profession, as well as its advantages as applied to therapeutics. The Company will also make a special reduction to physicians in putting in wiring.

OFFICE: Cor. ESPLANADE and SCOTT STS., TORONTO, ONT.

J. J. WRIGHT, General Manager.

... IT generally is a little salt and a good deal of lime and other impurities, but WINDSOR SALT, made by the most scientific process known, is pure, soluble, white, uniform in grain, and will not cake.

Purest and Best

WINDSOR SALT

THE WINDSOR SALT CO., Limited,
WINDSOR, ONTARIO.

“CANADIAN
Distilled and Bottled by
HIRAM WALKER & SONS,
* LIMITED *
WALKERVILLE, CANADA.

CLUB”



WHISKY

LONDON: NEW YORK: CHICAGO:

YUCCA The Wood Designed by Nature

For Surgeons' **SPLINTS**

*The Best Material yet
Discovered for the Purpose.*

LIGHTER than any other wood of sufficient strength.

VERY POROUS and open-grained, allowing free circulation of air to the fractured part.

ANTISEPTICS can be used without removal.

IN SHEET FORM it can be cut with scissors and used same as felt ; but, unlike felt, it does not lose its supporting qualities when wet.

IT HAS AMPLY PROVED ITS MERITS BY USE.

..... **Price List and Testimonials free**

YUCCA MANUFACTURING CO., - Jackson, Mich.
or LOS ANGELES, CAL.

Canadian Agents : THE S. B. CHANDLER, SON & CO., Limited,
TORONTO, ONT.

PSYCHINE

THIS is par excellence the greatest of all tonics, and is now prescribed by the medical profession throughout Europe and America. It aids digestion, combats stomach affections, creates appetite, nourishes and strengthens the whole human system. For **tuberculosis, throat and lung troubles** its effect is immediate and lasting. Tested on its own merits, it proves its great reputation as the renovator of the vital forces : and it is without exception the best remedy for mental and nervous exhaustion. And where the system has become debilitated by disease, it acts as a general tonic.

"After making a careful examination of the Compound called 'Psychine,' and having tested its action on several cases that came under my observation, I believe it to be a most valuable tonic, and when judiciously taken should prove beneficial in creating a healthful appetite for food tending to build up nerve tissue, etc., during convalescence from wasting diseases.

"It is pleasing to know that it contains no metallic compound.



"A. R. PYNE, M.B., Dou Inion Analyst."

For Sale by all Druggists. For descriptive circular, etc., address

THE T. A. SLOCUM CHEMICAL CO., LIMITED,
TORONTO, ONT.

Quinalgen - Dr. Vis.

This new Nerve Tonic has been thoroughly tried in Hospitals and by doctors in private practice. It has proved most successful in cases of

 Pneumonia, Neuralgia, Gout, Rheumatic Pains, La Grippe, Migraine, Sciatica and Hay Fever 

Unlike most other similar remedies QUINALGEN produces NO UNPLEASANT AFTER-EFFECTS.



THE G. F. HARVEY CO.

Manufacturing Chemists.



Saratoga Springs, N.Y.




Sole agents and importers for the United States and Canada.

Agents in Canada, **KEZAR & BENNETT**, Mille Roches, Ont.

Pamphlets with Clinical Reports may be had on application.

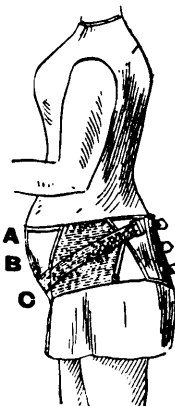
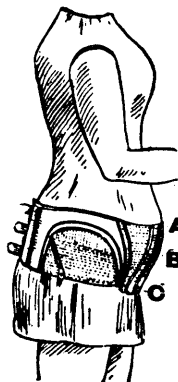
"HAPPY RELIEF"   

Abdominal Supporter

   IT HAS NO EQUAL

IS PRONOUNCED BY ALL PHYSICIANS who have examined it, and patients who have used it, to be the best and most perfect fitting supporter made. It is self-adjusting and affords instant relief. Those who have tried the same report that they would not be without it for many times the cost.

To physicians or patients sending measurements, a perfect fit is guaranteed. Measure directly around the body at points A, B and C, and always next to skin; also distance from C to navel, and from A to C, and from C to waist.



Prompt attention given to all orders. Liberal discount to Physicians and Druggists. Price List and Circulars sent on application.

MRS. F. L. PICKERING

Brantford

BOX 149

Ontario

When writing advertiser please mention THE CANADIAN JOURNAL OF MEDICINE AND SURGE Y.

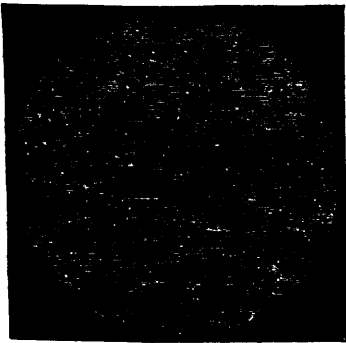
"The greatest therapeutic discovery of the age, and of the ages, is that where we cannot produce good blood we can introduce it."

What is Hæmathery?

A New Thing—and a New Name which, though literally translated (Blood Treatment), may not convey to every one a definite idea. It is a treatment which consists in opposing to a condition of disease the very power—good and sufficient Blood—that would naturally prevent it, that would still cure it spontaneously, and that actually does cure it spontaneously, wherever the blood-making work of the system is perfectly efficient; and therefore also *will* cure it, if a deficiency of the vital element be supplied from without, under proper medical treatment.

That Blood is such a power as here described, is an undisputed physiological fact. Its transmission from one animated organism to another, for the purpose of supplying a defect in the latter, is the substance of the Blood Treatment; and How to Do this, in different cases, is the form or description of the same. Blood may be taken from a healthy bullock (arterial blood—elaborated with due scientific skill); or it may be obtained in the well-attested living conserve known as bovine, from any druggist; and may be introduced into the veins of the patient in either of four ways, that may be most suitable to the case: viz.: by the mouth and stomach; by injection, with one-third salt water, high up in the rectum; by hypodermical injection; or by topical application to any accessible lesion.

A FILM OF BOVINE:
Showing the Blood-corpuscles Intact.



Micro-photographed
by Prof. R. R. Andrews, M.D.

THE CURE OF PULMONARY CONSUMPTION

is one of the latest and most wonderful developments of Blood Power—introduced mainly by the mouth, and sometimes also by spraying bovine into the trachea by an atomizer. Every week of judicious internal blood treatment, with proper medical and hygienic care, has resulted in steady improvement as to all symptoms, with scarcely an instance of check, much less of relapse, until complete apparent cure, and that in the more advanced stages of the disease. As further examples, may be mentioned: Anæmia, Cholera Infantum, Typhoid Fever, Hæmorrhagic Collapse, and many other of the most dangerous and aggravated diseases.

IN SURGERY: A CHRONIC ULCER,

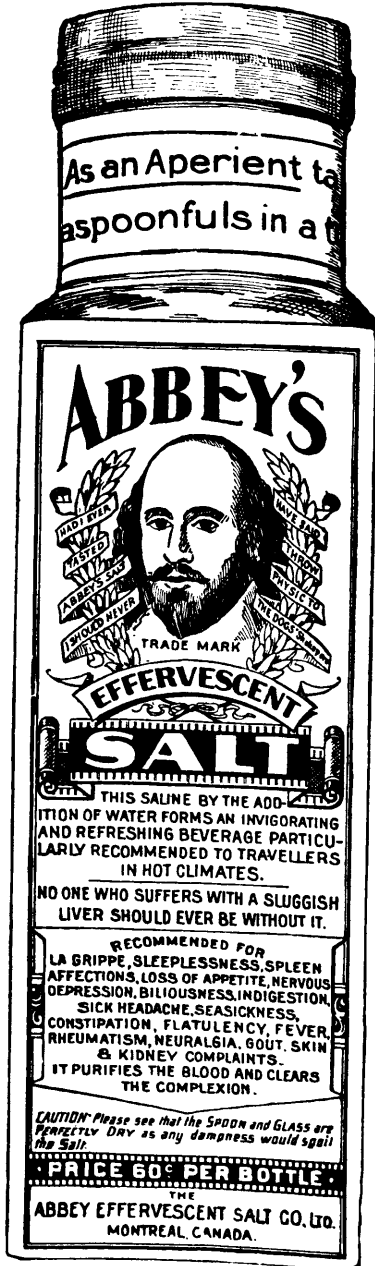
of no matter how long standing or obstinate and aggravated character, can be cured with certainty—at least, the first instance of failure has yet to be heard of—by constant application of bovine to the wound with proper surgical treatment and sterilization. Such cases are usually cured in from four to six weeks. So of traumatic injuries of all kinds; carbuncles, fistulas, abscesses, and even gangrene.

NUMEROUS CLINICAL REPORTS

of well known Physicians and Hospitals, where the Power of Supplied Blood is constantly relied on as a cardinal factor in the cure of disease and support of surgery, are at the service of every practitioner who desires to keep up with the progress of his profession, and may readily be obtained (including, of course, the technique and subsidiary treatments pursued) by applying to

THE BOVINE COMPANY, 75 West Houston Street, New York.

ABBEY'S



Effervescent

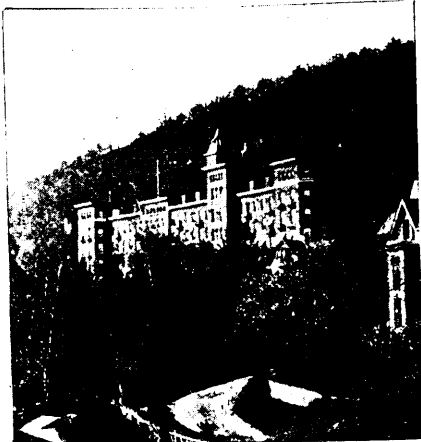
Salt

A Pleasant effervescing aperient, taking the place of nauseating mineral waters. Recognized and prescribed by eminent members of the profession in Great Britain, Europe and Canada

When writing advertisers, please mention THE CANADIAN JOURNAL OF MEDICINE AND SURGERY.

The Jackson Sanatorium

DANSVILLE, NEW YORK



ESTABLISHED IN 1858

The attention of physicians is called to this Institution as one that offers exceptional advantages and attractions. Under personal care of regularly educated and experienced physicians.

Location in a hill-side park overlooking the beautiful Genesee Valley country. Pure spring water nearly identical with the noted springs of Contrexéville, in France. Clear, dry atmosphere, free from fogs and malaria. Thorough drainage and sewerage systems.

Elegant *fire-proof* main building, and twelve cottages steam-heated and designed to meet every requirement of invalids, or seekers of rest and quiet.

All forms of fresh and salt water baths, electricity, massage, Swedish movements, inunction, etc., scientifically administered.

Superior *cuisine* under supervision of Mrs. Emma P. Ewing, of Chautauqua Cooking School.

Special provision for quiet and rest, also for amusement and regular out-door life.

Freedom from temptations of fashionable life, and from excitements and temptations of popular resorts. Electric bells, electric lights, safety elevator, library, daily papers, open fires, and every appliance for comfort, health, and good cheer.

On line Delaware, Lackawanna & Western R.R. from New York or Buffalo without change.

For illustrated pamphlet and other information,

Address—

J. Arthur Jackson, M.D.

BOX 2012

SECRETARY

“Stainless Iodine Ointment”

The Up-to-Date IODINE Preparation

Physicians will prescribe and use it in place of all others. It is better and stronger than the B. P. Formula, and does not discolor nor crack the skin. By permission we are allowed to refer to the following prominent physicians in Toronto who are using and prescribing it:

*Arthur Jukes Johnson, M.B., M.R.C.S., Eng., Coroner. A. H. Garratt, M.D., C.M.
J. S. Hart, M.D., M.B., R. B. Orr, L.S.A., Lon. Adam Lynd, M.B. And others.*

It is also being used in the TORONTO GENERAL HOSPITAL.

Physicians (only) who do their own dispensing can procure it direct in ½-lb. and 1-lb. jars at a cost of \$1.00 and \$1.50 respectively (money to accompany order), express charges prepaid; or from wholesale druggists in 1-oz. bottles at \$1.80 per dozen. For 12 cents we will be pleased to mail any physician a sample bottle.

G. BROWN & CO., Proprietors,

PARKDALE, ONTARIO, CANADA

Bromo Chloralum



Non-Poisonous,
Safe, Odorless

**A Powerful Deodorizer,
Disinfectant, Saline
Antiseptic and Styptic.**

Arrests and Prevents
Putrefaction and Contagion.

It is an ideal prophylactic in threatened epidemics of contagious or infectious diseases. In its neutralizing effects on all germs of disease it surpasses every other preparation of its kind.

*One bottle, diluted with water, will make
12 pints of proper strength for use.*

Send for Sample and Pamphlet.

BROMO CHEMICAL COMPANY
32 West Broadway, New York

A SUCCEDANEUM FOR MORPHIA.

Antikamnia

OPPOSED TO PAIN

CERTAINTY
IN
MEDICINE

DOES
NOT DEPRESS
THE
HEART

NO
DRUG HABIT
INDUCED

NO
TOXIC
EFFECT

OUR PREPARATIONS

Antikamnia Powdered.
Antikamnia Tablets.
Antikamnia and Codeine Tablets.

Antikamnia and Quinine Tablets.
Antikamnia and Salol Tablets.
Antikamnia, Quia. and Salol Tablets.

BRITISH AND
COLONIAL DEPOT: 46, Holborn Viaduct, London, E. C., Eng.

Send Your Professional Card
For Brochure and Samples to

THE ANTIKAMNIA CHEMICAL CO., St. Louis, Mo., U. S. A.

Church's Auto-Voce Institute

ESTABLISHED
1890

STAMMERING

And Other Speech Defects.

What *The Canadian Journal of Medicine and Surgery* says about Church's Auto-Voce Institute:

"The Medical Profession can have every confidence in the firm of CHURCH & BYRNE."

9 PEMBROKE ST., TORONTO

PURE FOOD

• • IS THE DEMAND OF THE HOUR

For the "Staff of Life," AS IT SHOULD BE, send or telephone to

THE MODEL BAKERY

Cor. SOHO and PHOEBE STREETS, TORONTO

Blaud's Pill Capsules

Equal to 1, 2 or 3 Blaud's Pills,
and Capsules of

Blaud's Pill with Arsenic

These far surpass Blaud's Pills in efficacy,
as they neither oxidize nor harden.

IN BOXES OF TWO DOZEN AND ONE HUNDRED

Prepared by

Duncan, Flockhart & Co.

EDINBURGH

Agent in Canada . . .

MR. R. L. GIBSON, 88 Wellington Street West

Samples free on application.

TORONTO

ESTABLISHED 1855.

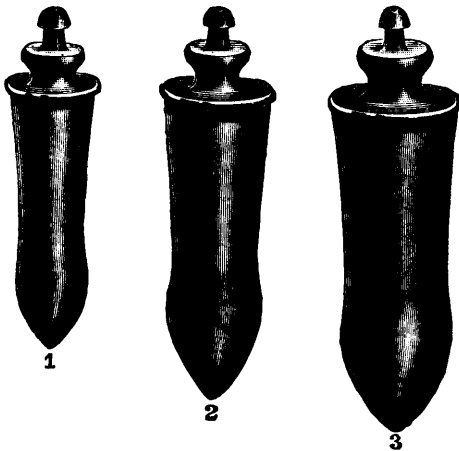
HALSEY BROS. CO.

Homeopathic Supplies

OF THE HIGHEST STANDARD.

Publishers of "ORIFICIAL SURGERY," by E. H. Pratt, M. D., illustrated with Photo Engravings, price \$3.00 net, by mail \$3.15.

Dr. Weirick's IMPROVED SELF-RETAINING Rectal Dilators.



For the cure of Piles, Constipation, Rheumatism, Insomnia, Dyspepsia and all chronic diseases caused by a faulty condition of the circulation.

Their use relaxes the sphincters, stimulates the sympathetic nervous system, equalizes the circulation, relieving congestion and in this way effects a cure.

They are made of hard rubber, have a hollow tube running through the center which admits of flushing the bowel by attaching an ordinary syringe.

PRICE, \$2.50 PER SET OF THREE.

Sent by mail on receipt of price.

HALSEY BROS. CO., 65 Washington St., Chicago, U. S. A.

SEND FOR FREE PAMPHLET ON ORIFICIAL PHILOSOPHY.

Beware of Imitations and Substitutes.

MORRHUOL
The Curative Principles of God Liver Oil. A Hyper-Alimentary Stimulant.

MORRHUOL CREOSOTE In Capsules
Containing 3 Minims of Morrhual and 1 Minim of Pure Beechwood Creosote. In Tuberculosis and Catarrh.

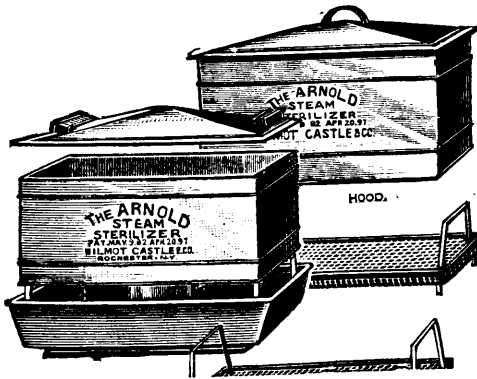
STRONTIUM (PARAF-JAVAL)
Salts and Standard Solutions of Bromide, Iodide, Lactate and Salicylate.

PHOSPHOGLYCERATE of LIME
(Chapoteaut) Capsules, Syrup and Wine
Neurasthenic Tonic.

APIOLINE
Active Principle Of Parsley.
Powerful Emmenagogue.



Agents for Canada,
Lyman, Sons & Co., Montreal P.Q.



Arnold Sterilizers.

All shapes and sizes for all purposes. They are used and recommended throughout the world

- By **Physicians**, to sterilize instruments, surgical dressings, etc.
- By **Hospitals**, for general sterilizing purposes.
- By **Laboratories**, for bacteriological investigations.
- By **Families**, to sterilize and pasteurize milk for babies and invalids.

Catalogue mailed on application.

WILMOT CASTLE & CO.
20 Elm Street, Rochester, N.Y.

UNPALATABLE AND INJURIOUS teas are best guarded against by buying a Packet.

MONSOON INDO-CEYLON TEA

Is packed in sealed lead packets to avoid the risk of adulteration. From 25 cents a pound up to 60 cents. All Grocers keep it.



CALVERT'S

CARBOLIC DISINFECTANTS,



SOAPS, OINTMENT, TOOTH POWDER, ETC.,

Have been AWARDED 85 MEDALS and DIPLOMAS for SUPERIOR EXCELLENCE.

Calvert's Pure Carbolic (Fluid and Crystals), Carbolised Tow, Carbolic Medical Soap, Sulpho Carbolates of Zinc, etc., are specially prepared for the Profession, and a Price List may be obtained through any of the Wholesale Druggists, or direct from the manufacturers.

F. C. CALVERT & CO., Manchester, England.

PEPTOGENIC MILK POWDER

renders cows' milk just as digestible as mothers' milk—the baby has to do the rest.

Cows' milk treated with the **Peptogenic Powder** becomes the closest possible approximation to mothers' milk in every detail—percentage of all constituents and character of albuminoids.

THE FUNDAMENTAL DIFFERENCE

between cows' and human milk is in the character of their albuminoids—caseine in cows' milk; soluble, diffusible albuminoids in mothers' milk.


The **Peptogenic Powder** and method afford the only means of adjusting this difference and adapting cows' milk to the digestive functions of the infant.

Sample and pamphlet sent gratis upon application.

FAIRCHILD BROS. & FOSTER, NEW YORK.

Have You Tried Them 

CRAMER X-RAY PLATES

Just out.  Specially made for X-Ray Work.

Full Descriptive Catalogue sent to any address upon application.

G. CRAMER DRY PLATE WORKS
ST. LOUIS, MO.



BLOOD VITALITY

The **ESSENCE OF LIFE** is the Blood.
The Vital Element of the blood is **Hæmoglobin**.

Without a normal percentage of this elementary principle the tissues are **insufficiently oxygenated** and **poorly nourished**.

With a proper proportion the vital functions are quickened and the entire system thoroughly fortified.

Pepto-Mangan ("Gude")

is a **hæmoglobin producer**, because of the quickly assimilable **Organic Iron** and **Manganese** which it contributes to the devitalized circulatory fluid existing in cases of

**Anæmia, Chlorosis, Amenorrhœa, Dysmenorrhœa,
Bright's Disease, Chorea, etc.**

Prescribe **PEPTO-MANGAN "GUDE"** in original bottles containing $\frac{3}{4}$ xi.

IT'S NEVER SOLD IN BULK.

M. J. BREITENBACH COMPANY.

Sole Agents for United States and Canada,

LABORATORY :
LEIPZIG, GERMANY.

56-58 WARREN ST., NEW YORK.

Gude's Pepto-Mangan can be procured from all Druggists in Canada.

ADVERTISED ONLY TO THE PROFESSION.

STANDARD (TRADE MARK— REGISTERED.) RELIABLE

IMPERIAL GRANUM FOOD

THE GREAT

FOR INVALIDS FOR CHILDREN.

The illustration shows a man in a white coat and a child in a white dress kneeling on either side of a bowl filled with granules. The man is looking into the bowl, and the child is looking at him. Above the bowl, the words 'THE GREAT' are written in a circular arrangement. The bowl has a decorative pattern on it.

HAS won the approval of physicians because its merits have been proved by years of clinical success—often in cases when life seemed depending on its retention. Therefore, while a very large majority of the medical profession are acquainted with its great value, and know from experience that no other food fills so satisfactorily such a wide range of usefulness, still no article of exceptional merit can be favorably received and recommended by physicians without being closely followed by imitations and competition, and the **IMPERIAL GRANUM** is not an exception.

It has justly acquired the enviable reputation of being

• • • AN • UNRIVALLED • NUTRIMENT • FOR • • •

INVALIDS • AND • CONVALESCENTS • AND • FOR
Nursing Mothers, Infants and Children.

It contains no malt, no cane-sugar, no glucose, but is an absolutely pure food, most carefully and conscientiously prepared from the finest growths of wheat, and contains the largest possible quantity of nourishment, requiring the least possible labor for its digestion, and although in extreme cases it is prepared with water only, it is generally used in combination with milk, and no matter what physician's preference may be as to the form in which milk is to be used—as varying conditions may indicate—the perfect coadjuvancy of **IMPERIAL GRANUM** can always be depended on.

Literature and **SAMPLES** for clinical test, supplied **ONLY** to **PHYSICIANS** and trained nurses. Sent **FREE**, charges prepaid, on request. **CORRESPONDENCE SOLICITED.**

JOHN CARLE & SONS, 153 Water Street, NEW YORK CITY.
SOLD BY DRUGGISTS generally.

Predigested Beef is the basis of Armour's Nutrient Wine of Beef Peptone—a preparation which presents the entire digestible substance of prime, lean beef in a form requiring no effort of the digestive organs to render it diffusible.

Nutrient Wine is more of a food than a stimulant, and is invaluable in the treatment of Typhoid Fever, Phthisis, Cancer, Ulceration of the Stomach, or any disease accompanied by faulty or insufficient nutrition.

Put up in pint bottles that retail at \$1.00.

**Armour & Company,
Chicago.**

The Canadian Journal of Medicine and Surgery

A JOURNAL PUBLISHED MONTHLY IN THE INTEREST OF
MEDICINE AND SURGERY

VOL. III.

TORONTO, MAY, 1898.

NO. 5.

Original Contributions.

THE TREATMENT OF INEBRIETY.

BY A. M. ROSEBRUGH, M.D.

BEFORE proceeding to the discussion of the medical treatment of inebriety, it will, perhaps, not be considered out of place to make some reference to the question from a more general standpoint. About two years and a half ago a deputation from the Ontario Medical Association waited upon the Ontario Government for the purpose of urging the establishment of an industrial reformatory in the Province for habitual drunkards. Petitions have also been sent to the Government by the Ontario W.C.T.U., by the Prisoners' Aid Association, and by other public bodies, with regard to the great need of a reformatory for inebriates, but the Government declines to take action, although some members of the Government admit that something should be done for the unfortunate class referred to.

In January last I was commissioned by the Prisoners' Aid Association of Canada to make a tour of inebriate hospitals and interview specialists in inebriety, with a view of formulating a practical scheme to be submitted to the Ontario Government, covering the entire question of the treatment of inebriates in the Province. This commission has been executed, and my formulated scheme has been presented to the association aforesaid, but its consideration has not, as yet, been taken up. My recommendations in brief are as follows:

1. The appointment by the Lieutenant-Governor in Council of an inspector of inebriate institutions. This inspector should be a qualified medical practitioner who has made the medical treatment of inebriety a special study.

2. The inspector should organize in the city of Toronto a hospital for the medical treatment of pauper male inebriates of the more hopeful class, and in

other cities of the Province an inebriate department in the existing general hospitals, more especially for pauper male inebriates.

3. An industrial reformatory should be established on the farm colony plan for the custody of the more hopeless or incorrigible class of male drunkards, and where they should be detained on indeterminate sentences.

4. Pending the opening of an inebriate hospital in Toronto, it would be both humane and in the interests of prison reform to give special medical treatment to the dipsomaniac inmates of the Central Prison.

5. For the more hopeful class of female inebriates, cottage homes (or utilizing existing homes) are recommended for special medical treatment.

6. For the incorrigible class of female drunkards, full two-year sentences to the Mercer Reformatory for Women are recommended.

7. In the adoption of scientific medical treatment the Norman Kerr-Crothers system or general plan of treatment is recommended. In the interests of science and good morals, proprietary remedies should not be used.

8. The adoption of the "probation system" for giving a helping hand to patients subsequent to treatment for inebriety.

The Ontario Medical Association has also asked the Ontario Government to make provision for the custodial treatment of epileptics. Question—Might it not be both a wise and an economical arrangement to provide a large farm colony for both classes under one management, the epileptics and the inebriates being provided for on the same or on an adjoining farm colony? Many of the inebriates could be utilized as farm helps, nurses, guards, etc., on the farm colony for epileptics. It is self-evident, it seems to me, that by carrying out the scheme herein formulated, the cost of treatment would be reduced to a minimum and the number of chronic inebriates remaining to be provided for at the Reformatory for Women or on a farm colony for men would be reduced to small proportions.

MEDICAL TREATMENT.

It will be observed that in the above summary of my formulated scheme, I recommend the adoption of what I designate as the "Norman Kerr-Crothers System" of medical treatment. As a matter of fact, there is no system of treatment known as the Kerr-Crothers system. This is simply a short method of expressing the idea that I approve of the medical treatment of inebriates on sound principles only and in accordance with the tenets of legitimate medicine and in accordance with the general principles enunciated by Dr. Norman Kerr, the recognized English authority, and by Dr. T. D. Crothers, the recognized authority in America.

I have been asked to contribute an article to the CANADIAN JOURNAL OF MEDICINE AND SURGERY on the treatment of inebriety from the medical standpoint. After giving the matter due consideration, I decided that I could not comply with the request more worthily than by giving an abridged statement of the treatment as formulated by the two recognized authorities just referred to.

In the classical work of Dr. Norman Kerr on the Etiology, Pathology, Treatment and Jurisprudence of Inebriety or Narco-mania, out of a total of 780 pages (3rd edition, 1894), 120 are

devoted to the question of treatment. As an introduction to the question of treatment Dr. Kerr takes up the discussion of the historical (so-called) antidotes for the crave for alcohol, including the following: The Turkish bath, coca, alcoholic extract of frogs, raw beef, vegetarianism, saturating food with liquor, the strychnine cure, the gold cure, cinchona bark cure, and cure by hypnotic suggestion.

The first indication in sound treatment, according to Dr. Kerr, is to withdraw all alcoholic stimulants. This can always be done with perfect safety. The second indication is to remove any predisposing or exciting cause. The special features in each case must be carefully studied. Any physical or mental ailment must be treated according to indications. Dietetics and hygiene play an important rôle in the intelligent treatment of inebriety—quite as important, in fact, as the use of drugs for the removal of the drink-crave. Except in the case of surgical accidents or sea-sickness, collapse or delirium tremens very rarely follows the sudden withdrawal of intoxicants. When these are feared, however, the system must be fortified, firstly, by appropriate food such as the patient can digest and simulate; and, secondly, by the use of medicinal remedies. The following mixture is recommended to aid wisely chosen food to avert unpleasant complications:

℞	Inf. calumb.,	fl. oz. j.
	Sp. ammon. aromat.,	fl. dr. jss.
	Tr. cardamom. co.,	fl. dr. jss.
	Aq. distillat.,	ad fl. oz. vj.

S. A sixth part every three hours.

In case of disordered digestion—nausea, vomiting, furred tongue—milk with soda or limewater, with ice and a stimulating effervescing mixture, would be given. 20-grain doses of potassium brom. are also given when thought necessary. The following form Dr. Kerr finds of service in these cases, and may be used with or without the bromide:

℞	Potass. bicarb.,	gr. 120.
	Sp. ammon. ar.,	fl. dr. j.
	Tr. cardamom. co.,	fl. dr. j.
	Tr. nucis vomicæ.,	fl. ℥ xij.
	Aq. distillat.,	fl. oz. vi.

S. A sixth part every four hours in effervescence with an acid powder—say, citric acid—15 grains. Hydrocyanic acid in two minimum doses may be added to this mixture.

In case of vomiting, very little water should be taken. It is better to suck a small piece of ice or take small sips of either hot or cold water. Milk or farinaceous diet are indicated here. Arrowroot and milk will be retained, in many cases, when nothing else will be. Tonics at this stage should be very sparingly admin-

istered. Bismuth and opium are used in cases where there is nervous irritability or *mania a potu*.

When the gastric disturbance has abated, a nerve and liver tonic should be prescribed. The following combination has been found useful in Dr. Kerr's hands :

R.	Tr. nucis vomicæ,.....	fl. dr. ss.
	Acid nit. dil.,.....	fl dr. j.
	Liquor taraxici,.....	fl. dr. vj.
	Tr. cardamom. co.,.....	fl. dr. j.
	Aq. distillat.,.....ad	fl. oz. vj.

S. A sixth part three times a day.

The bowels should be acted upon by podophyllin or calomel.

To procure sleep and promote nervous quietude, which is often essential, narcotics should be avoided, if possible. Try the effect of a hot foot-bath at bedtime, or a good-sized towel wrung out of hot water, applied to the epigastrium, and covered over with folds of warm flannel tightly bound with a bandage round the body. The bromides are to be preferred to an opiate, and they may be combined with henbane with advantage. The addition of chloral hydrate is an advantage in intractable cases. Chloral should not be given in large doses, however. Sulphonal is serviceable, and hot and cold baths are useful.

Constipation is a very common complication, and should not be neglected. Oatmeal porridge, whole meal, and brown bread and stewed fruit (for breakfast) will keep some patients free from constipation.

Bursts of excitement and violence following an inebriate paroxysm will subside as the poison is gradually eliminated under a judicious course of digestible nourishment,

As already mentioned, an important factor in the successful treatment of inebriety is the remedying of the predisposing cause, the pre-inebriate morbid condition. Another indication is to repair the physical damage and to strengthen the will-power. By the construction of new healthy structure in the reparation of tissue, there is nothing better than good healthful food, but the food must be such as both the stomach and the duodenum can digest. The diet must be judiciously selected, and different diet is needed by different individuals.

In the selection of drinks for patients after treatment for inebriety, Dr. Kerr is very emphatic in the condemnation of all drinks that contain even 1 per cent. of alcohol. All tinctures and medicated wines are to be avoided. There must be total abstinence without any exception on either medical or religious grounds. Only unfermented wine should be used at the communion table. A sip of alcoholic liquor, even after years of abstinence, may be sufficient to relight the old crave for intoxicants.

To diminish the tendency to relapse, the will-power must be

exercised, and to this end it is imperative that every possible auxiliary be called into action. The reason must be appealed to and moral and religious influences brought to bear. "Scientific medical treatment," says Dr. Kerr, "includes attention to hygiene, to diet, to the body, brain, mind, and *morale*. Everything that can contribute to the improvement of the soul and spirit, as well as to the reparation of tissue, has its place in the medical *armamentarium*."

The will-power may be strengthened, moreover, by the mere act of taking medicine, even if it be only a *placebo*. A gentle tonic composed of tr. gentian. co., acid nitromur. and tr. cardamom co., is useful for this purpose. The syrup of orange and quinine, (Beckett's) is a palatable substitute for the bitter beer of the drinker.

Strychnine pills, preferably the nitrate, gr. $\frac{1}{50}$, twice a day, is sometimes efficacious when other preparations have failed. The citrate of iron (or iron and quinine) and strychnine may also be used. Dr. Kerr, however, prefers nux vomica in these cases, as, for instance, a pill containing $\frac{1}{4}$ gr. of the extract, with $\frac{1}{2}$ gr. of belladonna, twice a day, or the tincture in five-minim-doses, with dilute phosphoric acid and aq. chloroformi, three times a day. When the liver is affected, "nux, with dilute nitric acid and taraxicum, is invaluable. An occasional dose of blue pills, followed by a saline aperient draught, will unload the oppressed viscera and relieve the *malaise*."

A well-known reformed drunkard in England took the following combination for seven months, which he found a valuable remedy:

R	Ferri sulphat.,	gr. v.
	Magnesia.,	gr. iv.
	Sp. myristica.,	fl. dr. j.
	Aq. menth. pip.,	ad fl. oz. jss.

S. The draught to be taken twice daily.

With reference to the mode of administration of drugs in treating inebriety, Dr. Kerr does not resort to hypodermic medication. He has, he states, a strong aversion to "the introduction of physic under the skin."

In many cases there are diseased conditions other than inebriety present. Where this is the case these conditions must be met. There may be a syphilitic taint, a history of malarial trouble, scrofula, anemia or brain-fag. "Each case is a study in itself." "No two patients will be found alike."

Dr. Kerr points out the importance of early treatment in inebriety, and especially in view of the fact that in many cases the inebriety is merely a symptom of some pathological condition of the brain or nerve centres. The symptoms of disease are often manifest long before any act of drunkenness has taken place, as,

for instance, moral perversion, sleeplessness, languor, and a feeling of *malaise*. Judicious treatment at this early stage is urgently demanded. In many cases nerve-foods are advantageous, such as the phosphates and phosphites and non-intoxicating malt preparations.

TREATMENT BY T. D. CROTHERS, M.D.

The following is a summary of Dr. Crothers' article on "Alcoholism and Inebriety in Hare's System of Practical Therapeutics:"* Inebriety in a certain class of cases is preceded by symptoms of melancholia or dementia. "The brain and nerve condition is one of progressive degeneration, and the drink impulse is a psychological demand for relief." These cases should be clearly diagnosed and all advice and treatment based on the facts. They are on the border-line in regard to mental and physical health, and the physician should see that measures are adopted that will make a thorough change in their present habits and non-hygienic rules of living. The causes and breeding-grounds of neurotic degeneration should be broken up. These cases should never be sent to jail or treated as moral delinquents. They require hospital or asylum treatment, and "the alcohol question will never be solved until this is done." Jail treatment is singularly fatal to this class.

In a second class of cases the sudden excessive use of spirits is preceded by a chain of symptoms less pronounced, but the withdrawal of spirits unmasks the mania. They are in a state of irritation and intense activity, and partial delirium and acute delirium follows the removal of spirits requiring restraint.

A third class is the periodical drinkers. They drink to excess at certain distinct intervals. In a large proportion of these cases it is found that the parents are either insane, epileptic or alcoholic inebriates. The question of home treatment in these cases is most important—more especially during the sober intervals, which in some cases extends to many months. The diet is of first importance, as also the surroundings of the patients, the work, the climate, and strains and drains on the nervous system. The treatment is largely a question of hygiene and dietetics. Medicinally, the return of the drink-craze may be averted or partially neutralized by anticipating the date of said return and using the bromides freely a few days before the expected return of the paroxysm. The bromides may be given with impunity in these cases in 100-grain doses. Phosphoric acid or citric acid may be used. Strychnine, gr 1-40, every four hours before the paroxysm comes on is also valuable. The Turkish bath is also useful. The bowels should in all cases be acted upon freely on the first symptom of the return of the drink-storm. Rochelle salts with potassa bitart. every two hours is recommended. Chloral, gr. xv., with fl.

* Dr. Crothers is editor of the *Quarterly Journal of Inebriety*, and is secretary of the American Association for the Study and Cure of Inebriety.

ext. gelsemii, ℥ x., may be combined with xl.-grain doses of soda bromide to control the paroxysm. It must ever be borne in mind, however, that the control of the paroxysm is only a small part of the treatment. The condition which provokes the paroxysm is the objective point of attack.

In a fourth class of inebriates the treatment is most perplexing, namely, young men—sons of wealthy parents—with bad mental surroundings, bad company and ignorant. In treating these cases a radical change of life and surroundings is essential. They must go in training under the care of a physician who will regulate all the surroundings and conditions of life. If this cannot be done at home, the patient should be removed to a retreat for inebriates. Of tonics, either nux vomica, gr. $\frac{1}{4}$ to 1 grain, or arsenic tablets, gr. $\frac{1}{30}$, three times a day, may be used. Quinine, or quinine and iron may be used for a couple of weeks with advantage. The diet must be regulated carefully. Lean meat properly cooked and served at regular intervals is useful with or without farinaceous diet and fruits.

In a fifth class of inebriates, the inebriety is caused by overwork and general neglect of healthy living. These inebriates are from circles of business and active professional life. The drinking usually dates from some state of brain and nerve exhaustion. Except where there is an inherited disposition, such cases are largely curable. Prolonged rest of brain and nerves is necessary, however, in addition to abstaining from drink.

In a sixth class of cases the inebriety is due to brain injury, such as shocks or blows on the head. Some obscure injury antedating the inebriety makes the prognosis unfavorable. Iodide of potassium is indicated in these cases as also nux vomica, say, 10 grains of the former to 1 of the latter three times a day. Iodide of arsenic is also a useful remedy. Turkish baths massage, moderate exercise and quiet surroundings are also indicated. These cases require systematic care quite as much as cases of insanity.

A seventh class are preëminently *dipsomaniacs*. In these cases the impulse to procure spirits is literally a mania and becomes so intense as to sacrifice every consideration of sense and judgment. A strong cathartic and a Turkish bath daily, with massage, will in most cases overcome this mania. Bromides, iron, phosphorus, and cinchona are useful with a change of surroundings. Monobromated camphor in 5-grain pills every two hours has the same effect. A hot bath with rubbing is a sovereign remedy with Dr. Crothers in these cases. A pill of phosphorus $\frac{1}{2}$ grain, nux vomica 2 grains, and arsenite of iron $\frac{1}{4}$ grain, will build up the system and lessen future attacks. Fowler's solution in five-drop doses three times a day is a standard remedy in these cases. In dipsomania there is profound brain and nerve lesion, and the victim, for successful treatment, requires the advantages of a well-organized asylum for inebriates.

An eighth form of inebriety is due to the degenerative changes

of old age, and is to be treated with arsenic, mercury, and iodide of potassium. The steady use of baths is useful, and is, of course, increased by hygienic changes of life and living.

I had the privilege of visiting Dr. Crothers at Walnut Lodge Sanitarium, Hartford, in February last. His establishment is elaborately equipped with Turkish and other baths, which, I find, play an important rôle in the treatment of his inebriate cases. He seems to have great faith in the principle of *elimination* in the treatment of his cases. He purges and sweats them most heroically, and gets the whiskey out of his patients in short order.

The treatment of morphinism and delirium tremens does not come within the scope of this article.

SOME REMARKS ON MECHANICO-THERAPEUTICS.*

BY T. J. M'GILLICUDDY, M.D.

THERE are many who would seem to believe that our only remedial agents are drugs, because, notwithstanding the decided limitations of drug treatment in chronic diseases, they are content to go on employing this method for these diseased conditions year in and year out, and often with the most unsatisfactory results. It is entirely different in acute ailments, where drugs are of the greatest value.

To those who are unacquainted with the natural remedial resources lying dormant in the organism, who know nothing of the latent powers of recuperation by which (when properly developed) health is obtained and continued, the benefits resulting from mechanical treatment often are marvellous. The value of this method of treatment is well known in the Germanic countries. Many of our physicians are gradually recognizing its importance, although the practical utilization of it is to-day in infancy in the United States. It is an undisputed fact that the lack of proper physical exercise is the cause of much debility, disease and suffering. Inactivity of both the voluntary and involuntary muscles is a violation of the laws of our being, the punishment for which nature never fails to inflict. Civilized and barbarous nations have recognized this fact and acknowledge it. Systematic and uniform physical exercise, under medical direction, stands prominent to-day as the quickest and most certain curative method of many ills, because it is in compliance with the fundamental law of our physical existence. It has been stated that "mechanico-therapeutics embrace the treatment by a properly qualified physician of the sick (chiefly those suffering from chronic diseases), the deformed, the convalescent, the feeble, the aged, and persons needing to counteract the

Read at meeting of New York Co. Medical Association, December 12th, 1897.

effects of sedentary occupations, by means of active and passive movements, mechanical operations and manipulations executed by the hand directly upon the skin." This method depends for its value and brings about health and recovery by the utilization of these principles underlying the results that come from systematically exercising both the voluntary and involuntary muscles. Pre-supposing the addition of other proper dietetic and hygiene treatment, there is by this method a general strengthening and a healthful bodily development.

It is a physiological law that exercise strengthens, and that all organic development is that of gradual growth. This physical strengthening and development can only be accomplished by the systematic exercise of the muscular system, which includes about all the body except the framework, the padding and the nervous mechanism. Among the more immediate results of the curative exercise is an increase in the strength and rapidity of the heart beats as well as an increase in the frequency and depth of the respirations. As a consequence there is a more rapid circulation with an increased oxygenation of the blood, greater metabolism in the tissues and an increase of watery evaporation from the lungs and skin. The liver and kidneys are acted upon directly by stimulation of the venous flow. In the chest, abdominal and pelvic cavities there is a powerful suction on the returning venous blood due to negative pressure in inspiration, and this is increased in direct proportion to the frequency and depth of respiration. The lymph current is also quickened by the mechanical suction. The secretions of the glands are increased throughout the body and the muscles themselves are increased in size and strength; their firmness or density is also enhanced. Careful dietetic treatment is a necessary requisite, as the bodily nourishment must correspond to the exercise.

In carrying out the mechanical treatment the exercise is adapted from the beginning to the strength of the patient, and is increased by degrees only in proportion as the strength increases. If the exercise should exceed the strength, over-exertion results and permanent injuries to heart and lungs as well as the organs of movement may ensue. The functional capacity of these organs may be readily overtaxed, and here especially is where the care of the physician is required. If it were not for these dangers laymen might be entrusted in some cases with this work. Cardiac hypertrophy and albuminous urine are frequent results of over-exertion. The sudden loss of vitality also often leads to pulmonary hæmorrhages and phthisis.

When the exercise is insufficient the patient derives no benefit and atrophy and weakness still persist. It is necessary to ascertain for every patient the effort which corresponds to the different group of muscles, and which induces *normal* fatigue, and to continue to make that effort until the strength has increased and the patient feels that it is too slight, when the work is gradually in-

creased. Thus we go on developing those attenuated muscles that were undergoing atrophy from non-use, until the patient soon becomes restored to the normal physical state. By these measures we strive to cure chronic disease by regulating the circulation, digestion, secretion and excretion, and by bringing all the bodily conditions to the normal standard.

In November, 1895, in a paper read before this association, I insisted that, this work being academic, it should be in the hands of the physician and not the layman, and in the following spring, Dr. William H. Thomson made a similar observation—where mechanical treatment and manual treatment or massage is given by ordinary laymen for disease, in the majority of cases it does not meet the indications, but does no good if it do no harm. Laymen know nothing of pathology. Why, then, should we trust them with the treatment of disease? Manual treatment is a necessary part of mechanico-therapeutics. It should, however, be applied scientifically in a manner to obtain the physiological results desired from each manipulation. It would be better if the use of the word massage was discontinued by the profession because it has become debased. Manual treatment is preferable as it explains itself, and it shows that it belongs to the domain of the physician. The number of those outside of the medical profession who attempt to cure every disease by massage is appalling. They have here monopolized this field and brought a most valuable means of treatment into disrepute. These individuals may do very well to give the body a general rubbing, as after a bath, but we should never allow them to treat disease manually or otherwise. They have possession of this field in this country only, and with the endorsements of those who ought to know better, they go about with great pretensions vaunting their wonderful cures. If physicians did all the manual treatment of special organs or parts and left the "general rubbing" to the nurses, they would thus get rid of formidable rivals, who are now usurping much of the province of the profession, and save to medical men a vast amount of money that is now worse than wasted on Swedish and native charlatans. We complain bitterly of the druggists prescribing for our patients, while here is a greater enemy.

The latest mushroom growth that has sprung up in the field is termed osteopathy. This pseudo-science is having considerable vogue in the west. It has a grain of truth to its bushel of chaff, and here, as elsewhere, it is our duty to seize and utilize that grain, because, if we do not already possess it, we thus add to our strength. As liberal physicians we take the good no matter where we find it. So long as it is of genuine value to the sick and suffering we adopt it, and thus we leave no excuse for the foundation of sectarian schools or "parties."

With many there is a confusion of ideas upon mechanical treatment, especially when men in gymnasiums, who ought to know a little of something about it, fail to differentiate it from sport and

from physical culture. The lack of improvement in the patients sent them would tend to show their lack of knowledge.

Mechanical and manual treatment properly given is directly beneficial in many chronic disorders, such as those of the heart, lungs, stomach, intestines, habitual constipation, hæmorrhoids, pelvic congestions, weakness of the limbs, joint affections and spinal curvatures. Not less important are the indirect benefits obtained by the general strengthening and vitalizing physical exercise. Dr. Gustaf Zandi says it would not be possible for any of the chronic maladies to develop to a high degree without diminishing the vitality of the body and the general health. This general health that finds expression in the energy with which the living organism resists external injurious influences, or in the perfection wherewith the remaining organs work together to meet those dangers to the whole organism, which are engendered by the accidental over-exertion or under-exertion of any one member, the more perfectly this health can be maintained, the more independent it renders the individual of those manifold internal and external influences which limit his mental and physical capacity. It even enables him at times to successfully endure tests to which a less vigorous nature would succumb. By prolonged or repeated illness this beneficent reaction of nature against disease is diminished, and the regaining of health is rendered proportionately more difficult. In single cases special treatment may be able to remove the original disorder, but a condition of debility continues, which exposes the patient to a relapse or re-^{action}.

In other cases special treatment remains ineffectual, until by generally strengthening treatment the vital energies have increased and the powers of recuperation latent in the organism are again aroused to life. "The generally strengthening effect promotive of all the vital activities, which is possessed in so high a degree by systematic bodily exercise, is therefore of the utmost importance in the treatment of chronic ailments, and during convalescence after acute illness. But it is not alone through illness that the vitality is undermined. Senseless habits of life, intemperance, lack of light, air and bodily exercise, especially during one-sided over-exertion of the intellectual powers—all this consumes vitality and makes life from childhood to old age a sample book of maladies and infirmities of all sorts. It is the part of dietetic exercise to prevent this misery so far as it rests upon insufficient or one-sided physical exercise. . . . The great majority of every city population obtain through their wonted occupations a wholly insufficient or most one-sided, and, therefore, often injurious form of bodily exercise; for all these dietetic exercises are an actual and permanent necessity, as everyone must see who is in any way clear as to the importance of the muscles."

Hydrotherapy may also be included in part under mechanical treatment, as both cold and heat in the proper degree act as a stimulant or irritant to the vaso-motor system. They produce a shock

followed by a reaction, and thus exercise the muscularis of the blood vessels, and as all exercise, as I have already stated, not too strenuous, is beneficial, a strengthening and a permanent improvement of the nutrition of the body follows. Cold and heat are thus cardiac and vascular stimulants, the water being the medium of their application. Where there is weakness of the cardiac muscle, feeble circulation and weakened muscular power, these can be roused and strengthened and the bodily nutrition generally improved by the use of the bath. It should be graduated according to the strength of the patient. In those who are very feeble they should be of exceedingly brief duration so as not to cause exhaustion. If a thorough reaction and glow cannot be obtained they should immediately be discontinued. It is well always to advise the addition of a handful of salt to a basin of water in the sponge bath, and friction with brine towels afterwards to increase the irritant effect.

As a *résumé* we will briefly consider some of the principal remedial effects of the employment of curative exercise or mechanical and manual treatment.

1st. To regulate the circulation. The circulation of the blood and lymph is greatly influenced by the action of the muscles. Muscular action presses the blood through the veins more rapidly: thus its progress towards the heart is greatly accelerated. In cases of muscular inactivity, these scientific movements will often produce the quickest results in restoring an unbalanced circulation to its normal condition.

2nd. To increase secretion and excretion. Where there is a great diminution of secretion or excretion, systematic curative exercise and manual treatment is of great service. It is especially useful in cases of congestion of the liver and other viscera and inactivity of the skin.

3rd. To increase respiratory power. The breathing power and capacity of the lungs can in no way be so rapidly and powerfully developed as by mechanical and manual treatment. We have known persons to thus treble their breathing power in a few weeks. I have in mind now a case of chlorosis, a girl of seventeen, who all her life had been delicate. She had been given Bland's pills for two years without improvement. Her breathing power—or as some call it, lung capacity—at the beginning of the treatment was fifty cubic inches, at the end of four weeks it was 130 cubic inches, and in eight weeks it was one hundred and sixty (160) cubic inches. Thousands have been saved from a consumptive's grave by means of curative exercise. The lungs with their bronchi and blood vessels are mostly muscle, and functionate like the digestive organs only through muscular activity.

4th. To increase digestive power. In many chronic diseases of other organs as well as in functional derangement of the stomach, deficient muscular and digestive power of the stomach and intestinal canal may be greatly benefited and in many cases completely cured by means of this treatment.

5th. To increase assimilation. Many chronic diseases owe their cause to imperfect assimilation. It is not what we eat or what we digest that benefits us, but what we assimilate through the tissues. There is no means by which assimilation may be so powerfully stimulated and encouraged as by the careful employment of mechanical and manual treatment.

6th. To increase vital action. This method of treatment is of great service in cases of debility and general weakness and in all diseases where there is inactivity of the vital functions.

7th. To regulate muscular action. No remedy is of greater value in treatment of disordered muscular activity, as in various distortions of the spine, resulting from unequal muscular action; also in many cases of uterine displacement. In cases of paralysis no other remedy, unless it be electricity, will accomplish so much as systematic, skilful, mechanical and manual treatment.

In observations by Dr. Jacob Texhner, in treating deformities by physical development, he calls attention to certain facts:

1st. He says: "It is rapid improvement being noticed by the patients, their relatives, and myself within a week or ten days after treatment has begun.

2nd. "The improvement in general health and the increase of weight.

3rd. "The wholesome effect upon the nervous system by the cultivation of muscular precision and endurance.

4th. "The marked increase in the lung capacity.

5th. "The beneficial effect upon the heart's action, as shown by the diminished frequency of the pulse and the increase of pulse pressure after each treatment, as shown by Basch's sphygmometer.

6th. "That all patients continue to improve generally and muscularly long after active treatment has ceased."

CALIFORNIA AS A TOURISTS' RESORT.

BY JOHN HUNTER, M.D.

PHYSICIANS are, or think they are, or many of them wish they were, a hard worked lot. Unless it be druggists, probably few men grow old so quickly as doctors. Now, who of us, speaking from his own personal experience, will not say that a useful life is worth living and prolonging to a ripe old age. This being the opinion of every man, in so far at least as his own individual life is concerned, it naturally or rationally follows that every means available for the preservation and perpetuation of good health be utilized to the full. It is not so often the character of the work as the constancy and sameness of it that wears out both mental and physical stamina. Other vocations allow men to take periods

of rest at home, but a physician is practically obliged to get away altogether from his patients. So with benedictions for those who pay promptly, and maledictions for the other fellows, he packs his grip and bids adieu to the world of groans and anguish through which he daily treads. The question is, whither can he go? He must make his choice, since "The world is wide in time and tide." Granted that in his survey he looks away toward the Occident, C.P.R. rushed him through some of Ontario's fertile fields, and well he should enjoy them, too, for he will go many a dreary mile ere he sees their like again. Earth has few scenes where fertility, thrift and beauty are so happily combined as in Ontario. Owen Sound is reached, where palatial steamer is in waiting to float away over the cool billows of Lake Superior to Port Arthur. A pleasant run brings him to the western metropolis, Winnipeg, where a few days "solid enjoyment" may easily be obtained. Onward for days and nights the train speeds over prairies of seemingly unlimited expanse; the dazzling scenery of the Rocky Mountains exploited, and at last the long-looked-for Victoria harbor reached. Physicians being essentially non-mercenary few gaze northward to the fable gold fields of the Klondike, but turn toward that Eldorado where "jaded nature" can find repose. Steamer is taken to San Francisco, with its matchless harbor, hilly streets, great and small buildings, sunshine, fogs and sand storms, heterogeneous people, hurl-burly of commerce, fashion and folly; and in all an intensely interesting and wonderful place. There are points of interest—seashore, valley, mountain-peak, etc.—in endless variety. Moving southward along the coast we pass many gay summer resorts, each of which has its special attractions. From any of these, beautiful drives can be taken up the grain and fruit valleys; the Lick Observatory, Stanford University, etc., visited. Further south, on the sunny isles of Santa Rosa and Santa Cruz, or inland, protected from north winds, is Santa Barbara, with its salubrious climate. Here a mountain range running eastward is a dividing line between northern and southern California, and as it is to the latter that the trend of travel is mostly directed, both for pleasure and health, therefore it will be more interesting to intending tourist or invalid to have a fuller description of this "Sunland of the South." From Santa Barbara Los Angeles is soon reached; it is the business and fashionable metropolis of the South, a city of about 100,000 inhabitants, and growing rapidly. It has its beautiful avenues, parks, summer seaside resorts; in short, all the paraphernalia of modern life. It is the most western station on what is known as the "kite-shape or figure of eight" railway system. Taking a trip around this line is probably the greatest attraction of California. The run takes the tourist about seventy miles up the San Bernardino Valley, through an almost continuous fruit garden. Orange trees in full bloom during March and April, scenting the whole valley with their rich delicious fragrance, and laden with golden fruit from October until March again. Peaches,

apricots, nectarines, pomegranates, olives, figs, raisins blossoming and ripening between February and August; rose, heliotrope, geranium, poppies, lilies and scarlet passion blooming almost perennially, but especially sweet, bright and fragrant during April and May, October, November and December. The green pasture fields of Alfalfa, clover, barley and wheat, and the vineyards rivalling the "vine-clad hills of Italy and Spain." There are many pretty towns. Pasadena, with its ostrich farm; Ontario and Riverside, with their famous avenues adorned with stately palm and cypress trees; San Bernardino, boasting of its comely municipal buildings, and Redlands, with its Memorial Library and peerless Sunley Heights. The scenery, embracing the jumble of lofty snow-capped peaks, bare rock-terraced mountain sides, the luxuriant fruitful foot-hills, down into the rich ever-green valleys with their boundless profusion of trees, shrubs, grains, fruits and flowers is enchanting. The best time for the tourist to visit this southern paradise is in April, May and June, or October, November and December. He will be dazzled and fascinated by its matchless beauty.

The unselfishness of the physician lends an interest to everything helpful to others, so a few words about the "sunny south," as a health resort, the ideal climate for the sick, would be cloudless skies, warm balmy sunshine, pure air, and surroundings where everything good could be easily procured, the kindest of people, and everybody else well and able to wait on the patient. Such conditions are reserved only for the good in another world. The best we can do here is to select places relatively good. Compared with more northerly climatic conditions southern California offers many advantages. Providing a patient takes reasonable care, an exceptional flurry of snow or several frosty nights in winter do not injure him half as much as he and his friends think. If physicians would only frankly tell those whom they send away to expect vicissitudes of one kind or another, no matter where they go, a world of worry and disappointment would be saved. Invalids have been known to actually refuse to leave the boat or car because it happened to be raining at the time of their arrival, and have wandered off to a far more unsuitable place because the weather was fair when they arrived at the latter.

The atmospheric conditions in these valleys are somewhat peculiar. To the north or east of them are great sandy deserts. In these, during the day, the air becomes intensely dry and hot, 120° or upwards. This hot air ascends and floats toward the Pacific Ocean, whilst a lower current passes from the ocean up the valleys, over the mountains, and rushes down to fill the vacuum in the deserts, or the currents reversed according to location of heat centre, whilst tornadoes, cyclones or electric storms are almost unknown; yet the variations of temperature are sufficient to make it always advisable to wear, or keep at easy access, woollen under-clothing or extra wraps. You may go to bed with the ther-

monometer at 80° in your bedroom—all the windows open, but by 4 or 5 a.m. the mercury is hugging 28 or 30°, and you suddenly wake up and scramble for blankets to cover up your bare limbs.

The winter is the rainy season, that is, an occasional wet day or two, and then several with warm sunshine. The spring and autumn months are delightful. The summer is dry and hot in day time, but cool and pleasant in the evenings.

Southern California in autumn, winter and spring is a veritable fairyland for tourists, and at all seasons has for invalids, especially those able to take care of themselves, as favorable resorts for recuperating health as can be found anywhere else.

HOW TO HYPNOTIZE.*

BY SYDNEY FLOWER, LL.D.

It is not at all advisable that the physician who has had no experience in this line of work should plunge immediately into the middle of things by taking as his first case some one of his chronic neurotic patients. The hypochondriacal and the hysterical are the most difficult to influence, and it is always better to begin work upon three or four young, sound, and healthy people. Select, first, either children of from ten to thirteen years of age, or young men and women below twenty-one. The sex is of no consequence.

Take a bunch of five boys, seat them in chairs in your office; darken the room just sufficiently to give the idea of rest; shut out as much as possible all noises of the street, and guard against all unnecessary interruption from without. No special hour is more advantageous than another. Hypnosis may be as easily induced after breakfast as after supper.

You are now ready to begin. Tell the boys, to commence with, that you are not about to try any exciting experiments with them, that you are simply going to show them that you can put them easily to sleep in the daytime, that whether they have never gone to sleep at that particular hour before matters nothing; the point is, they will go to sleep at your bidding. Impress upon them the fact that they have nothing to fear, nothing to be alarmed about at all, because there is no difference between hypnotic sleep and natural sleep, except that in the former they will answer when spoken to without waking up, whereas in natural sleep they will awake of their own accord as soon as disturbed. Boys are fairly reasonable creatures, and as soon as you have prepared the ground and gained their confidence in this manner, you will find them willing to pay attention to what you have to say. And herein lies the essential point in inducing hypnosis—you must *secure their*

* Written specially for THE CANADIAN JOURNAL OF MEDICINE AND SURGERY.

undivided attention. This must be done, not by reprimand, but by suggestion. It will not do to tell a boy whom you are trying to put to sleep that you can do nothing with him because he will not attend to you—you must tell him that he will go to sleep because he is attending to you. This will make him attend. You must impress his mind with the idea that he heeds what you say, and the result follows immediately that he *will* heed what you say. This is the fundamental truth of suggestion. Tell a lazy boy that he is lazy, endeavoring thereby to shame him into effort, and you only succeed in implanting in his mind the idea that to be idle is natural to him. Tell the same boy that he is by no means lazy, but rather of a bright, quick, temperament and eager to learn, and if he thinks you mean what you say, and are not making fun of him, he will accept your suggestion and surprise you by his alacrity in putting it into practice. Give the boy the same suggestion while he is in the hypnotic sleep, and you greatly intensify its effect upon his susceptible mind. If parents and teachers generally but understood the receptivity of the subjective, or sleeping mind, we should hear less about the disobedience of children.

It is assumed now that you have brought these five boys into an attentive frame of mind. Proceed in this way. Say: "I want you now to relax all the muscles of your bodies; take all the stiffness out of them; let your arms and legs become heavy; let your hands rest on your knees; you feel now as if you didn't want to move; as if you could fall asleep quite easily. In a little while you will fall asleep, but not just yet. Fix your eyes upon the knuckle of the little finger of your left hand. Keep your eyes fastened there. Don't move them; don't look round you. Don't pay any attention to anything but that knuckle. If it fades away from your sight, don't rouse yourself to wonder why. Take everything as it comes; quietly now, going to sleep. In a little while your eyelids will become heavy; your eyes will be tired; you will feel sleepy; sleep will steal over you; quietly now; that's very good; becoming drowsy now; eyes getting heavier; in a little while they will close tight, and you will be fast asleep."

These suggestions are to be given slowly, without any appearance of hurry or excitement. They should be uttered in a drowsy tone, and quite seriously. A seriousness which verges on severity is preferable in a first experiment. It is above all things necessary to impress your subjects with the idea that you are yourself in deadly earnest. If you give them leave to question your earnestness of purpose, you court defeat. By the time you have proceeded thus far one or two of the boys are unmistakably drowsy. Go round the half-circle now, closing the eyes of each with your hand, and say: "Sleep. You are going sound asleep. Your eyes are fast shut; tightly shut, and you cannot open them. Sleep soundly. You will hear me speaking to you, and you will answer me when I speak, but you will not wake up until I call you. Sound asleep. Eyes fast shut."

Put this test to the first boy who showed signs of drowsiness: "Your eyes are fast shut, and you can not open them. Try. Lift up on the lids; they will not open. Try hard; they remain closed. Sleep."

His eyes will not open. I have yet to find a boy who is insusceptible to suggestion thus applied.

Raise his arm now, and say: "Your arm is raised: you can not lower it. It remains up. It is getting stiff and rigid. You can not bend it or lower it."

If the arm remains up, you have induced cataleptic rigidity, and the boy is in good condition for any suggestions you may have to give for his therapeutic or educational advantage.

Although it is quite unnecessary to put this cataleptic test to any subject, it is advisable to try it in order to satisfy yourself that hypnosis is really induced. But remember, that if the arm drops inert and heavy to the side in defiance of your suggestion, hypnosis is present in this case also, and a lethargic condition is evident.

You will not seek to put your subject through any of the foolish tests which the travelling professor loves to mystify his audiences with, because these things are to the detriment of the subject in the end, and serve no useful purpose at any time. What you require for therapeutic purposes is sleep—induced sleep; that deep and refreshing sleep in which there is amnesia, or loss of memory, on waking.

This is the sleep that allays fever, cures nervousness, regulates the pulse, and restores equilibrium and tone to the system—not because of the sleep alone, but because of the *suggestions* that accompany, and are a part of the sleep.

Proceed to waken your subjects in a reasonable manner. Don't tell them that when you snap your fingers they will jump out of their chairs, because you give them a shock by so doing.

Wake them gradually by saying in a quiet tone of voice: "You have had a sound and refreshing sleep; you feel better in every way; your head is cool; appetite good; health much improved; and this benefit will increase from day to day. You will not go to sleep for any one but me. No one else will be able to hypnotize you. Remember that. No one has any influence over you whatever. This is a natural sleep, and you are not in the least afraid of it. You go to sleep for me because you want to sleep. If you did not, I could not influence you. There is no such thing as controlling you against your will. You will wake much rested and better. The next time you will fall asleep after looking steadily in my eyes for a few minutes. You will become drowsy immediately and go easily to sleep. Remember the suggestions I have given you. Now I am going to waken you. When I count five you will be wide awake. Quickly now—one, two, three, gradually waking up. Four; your eyes are opening. Five; you are wide awake."

The physician will find that the whole art of applying hypno-

tism therapeutically lies in the suggestions given and the manner of making them. Patience, practice and perseverance are all necessary, but I have seen within the last few years so many remarkable cures of nervous diseases and of habits which medicinal treatment was powerless to remove, that I am astonished at the general ignorance on the part of the otherwise well-informed regarding this science. There are now three schools of suggestive therapeutics in Chicago, patronized exclusively by physicians, and we may hope that the interest which is making itself felt there will extend across the Canadian border.

DR. H. H. OLDRIGHT and Dr. G. G. Thompson, both of Toronto, have been appointed Surgeon and Assistant-Surgeon, respectively, to the Queen's Own Reserve.

THE Chapter of the Order of the Hospital of St. John of Jerusalem in England, with the sanction and approval of Her Majesty the Queen, have appointed as honorary associates or members of the fourth class of the Order the following: Hon. F. W. Borden, Minister of Militia; Dr. T. G. Roddick, M.P., President of the British Medical Association; and Major John McLean, President of the Canadian Press Association. The chapter has passed a special vote of thanks and ordered it to be engrossed on vellum, to Dr. C. R. Dickson, local Secretary of the St. John Ambulance Association in Toronto. These distinctions are conferred for services in connection with the St. John Ambulance Association, the President of which is H. R. H. the Prince of Wales.

THE following are the graduates in medicine this spring from Queen's Medical College, Kingston: N. W. Anderson, Kingston; C. C. Armstrong, Kingston; C. H. Burger, Kingston, Jamaica; W. F. Callfas, Kingston; G. W. Collison, Brinston's Corners; W. N. Condell, Ventnor; D. J. Corrigan, Kingston; N. A. Davis, Fallowfield, Ont.; H. H. Elliott, Frankville; U. S. Fedden, Brockville; J. E. Gage, Riverside, Cal.; Robert Hanley, Kingston; A. E. Hlett, Kingston; W. H. Hills, Acadia Mines, N.S.; W. A. Jaquith, Sydenham; E. J. Lake, Kingston; H. V. Malone, Kingston; J. F. Mather, Plainfield; W. M. Moffett, Carleton Place; C. A. Morrison, Kingston; C. J. McCambridge, Kingston; C. E. O'Connor, Kingston; M. J. Pike, Sebwaing, Mich.; R. C. Redmond, Lansdowne; J. F. Scribner, Kingston; Rev. A. Grasset Smith, Deseronto; A. E. Stewart, Kingston; A. L. Tinkas, Greenbush; H. M. Waldren, Guelph; Ward Young, Odessa. Medallists—H. H. Elliott, Frankville; C. C. Armstrong, Kingston. The same gentlemen will be house surgeons at the Kingston General Hospital, subject to approval of the Board of Governors. Next in order of merit—A. L. Tinkas, Greenbush; U. S. Fedden, Brockville. Prize of \$25 awarded for the best examination in senior anatomy, senior physiology, senior materia medica, T. H. Johnston, Stirton, Ont.

Surgery.

REMARKS ON RECTAL SURGERY.

DURING the course of some remarks on Rectal Surgery by Thomas Bryant—published in a recent issue of *The Lancet*—in speaking of Perforating Ulcers of the Rectum, he said, the fact that a simple ulcer may start in the rectum and perforate its walls and so give rise to a faecal ischio-rectal abscess is well recognized, but he was not so sure that the profession as a body recognize the occurrence of a simple ulcer of the rectum perforating its walls at some higher or lower level and giving rise to faecal extravasation with as a result septic cellulitis of the perineum, abdominal parietes, gluteal region, and scrotum in the male and external genital organs of the female. He would also add to these possibilities a perforation of the bladder in the male and of the vagina in the female subject. He said he had seen examples of all these conditions.

In 1872 he read before the Clinical Society of London the notes of two cases of recto-vesical fistula due to simple rectal ulceration treated successfully by left lumbar colotomy. One of these cases was in a man, aged sixty-four years when he underwent the operation, and who lived in comfort for six years after it and died from a ruptured heart at the age of seventy years. After death evidence of cicatricial repair of old ulceration was present in the rectum, with a very small fistulous opening between the bladder and rectum, which was still patent and through which a very little urine during life had passed at times into the rectum, but this had never been a source of trouble. The second case was of a man, aged forty-nine years, who had been passing faeces and flatus with his urine for three and a half years before he operated in 1870 and who made a good recovery. One year after operation he wrote: "No wind or faeces have passed into the bladder since the operation, although a little urine still passes into the rectum." In 1884 he wrote: "The operation has been quite successful as it has added fourteen years to my life. I am quite free from pain and I feel as strong as if nothing was the matter with me. The contents of the bowel all pass through the opening in the loin; nothing passes into the lower bowel except a little water from the bladder." Since these cases occurred he has had others to support the views they illustrate; for example, in 1882 he had a patient, aged sixty-five years, who died from pleurisy and oedema of the lung, who twelve years before had passed flatus with his urine without any known cause or any other symptom. This he continued to do for some months when he got well. At the post-mortem examination

the evidence of old ulceration of the rectum and of the former recto-vesical fistula was very clear, and there was a complete absence of any local organic disease.

About Fissure or Painful Ulcer of the Anus, he said it might have been thought since the symptoms of this affection are so characteristic that either a mistake in its diagnosis or a chance of its being overlooked were most improbable events, and yet it is true that from some cause or other such cases are too often passed over and allowed to drift. They are either regarded as piles by the patient and so treated on the patient's diagnosis by the practitioner, or the diagnosis is supposed to be confirmed if, after a superficial external examination, anything like a prolapsed internal or a swollen external pile is seen, or even a small prolapse of the mucous membrane of the bowel, or possibly a papilla-like fold of anal integument situated at either the dorsal or perineal extremity of the anus which is mistaken for a pile. Whereas to detect an ulcer a more careful examination of the part is absolutely essential, together with a greater appreciation of the value of the papilla-like fold of anal integument as a guide to an ulcer, for this fold of anal skin or papilla is one of the most constant and valuable indications of this kind of ulcer, whether associated or not with hæmorrhoidal trouble. To determine the fact of the existence of this ulcer no painful examination is either necessary or justifiable, for a painless external examination if rightly made can at once determine the question. With the patient on his side and the thighs well flexed the buttocks are separated and the surgeon with the thumb and index finger of one hand laterally draws aside the two sides of the anus and with the finger or thumb of the other hand raises or pulls down the characteristic fold of skin or papilla beneath which the presence of an ulcer is suspected, when if it be present the extremity of the ulcer or the whole ulcer will at once be seen, even if the ulcer exists alone, or is found to coexist with external or internal piles or even with a polypus, for it cannot be too well recognized that cases of piles, prolapse of the rectum and polypi when the seat of severe pain are mostly so from their being complicated with the painful ulcer; indeed, it is often owing to the grafting of this acute trouble upon an old one that the patient is induced to seek professional advice for his chronic affection. Should the ulcer be associated with piles and rectal prolapse the patient will often tell you that since he has had the severe local pains neither the piles nor prolapsed bowel have come down so much as they did formerly and that he has been able, therefore, to sit down with greater comfort, having been led by these apparent improvements to think that his piles or prolapse had taken a favorable turn; whereas the intelligent surgeon should in this report of his patient be led to a different conclusion and find an explanation of the facts which he may accept from his patient that the protrusion of the rectal trouble has lessened because the anus has become less patulous from the spasmodic

contraction of its sphincter muscle which is always associated with this anal ulcer and as a consequence lessens or forbids the prolapse which formerly occurred. Indeed, whenever a patient complains of sudden accession of anal pain in the act of defecation, and the persistence of a burning, cutting pain for a few or many minutes, or even for hours after the act; whenever a patient who has been known to have piles or prolapse suddenly becomes the victim of this intense local pain and as a consequence, seeks for relief, the presence of this trouble should be suspected, and no treatment ought to be suggested before a careful local examination has been carried out. When this trouble is grafted on to others, and piles, polypus, or prolapsus co-exist, the treatment of the recent affection should be included in the treatment of the older trouble and a cure of both should be secured.

The patient may refuse an examination with the natural dread of serious pain being excited or increased by the introduction of a finger, for he knows too well what the passage of a hard motion causes and that a liquid one is often as bad; but the practitioner can with confidence promise him that no pain shall be caused, for by careful manipulation, such as has been described, no pain need be or should be occasioned.

When the ulcer is once recognized its cure is soon brought about, if it be uncomplicated, by a forcible dilatation of the anus followed by a well-made incision through the whole length of the centre of the ulcer together with half an inch of the healthy tissue above and below its border, the incision being made to penetrate only through some of the superficial fibres of the sphincter muscle, whereas in slighter cases the forcible dilatation of the sphincter will suffice by itself. If the ulcer has been of long standing a deeper incision may be necessary than when it is of recent origin, but he claims never to have seen an uncomplicated case of anal ulcer in which the division of the whole sphincter of the anus was required.

F. N. G. S.

DR. MEYERS has gone to Philadelphia to take a course with Weir Mitchell at the Nervous Clinic.

DR. R. R. BENSLEY has been appointed Examiner in Physiology, Embryology and Histology by Toronto University, in place of Dr. Wright, resigned. Dr. J. B. Willmott was appointed Examiner in Medical Jurisprudence.

THE University of Wooster, Wooster, O., has appointed Dr. R. D. Moffatt, 311 Parliament Street, as examiner for the various examinations leading up to its post-graduate degrees, which have been and are to be held in Toronto as required. Dr. Moffatt, being also presiding examiner for McGill University, will have charge of its annual matriculation examination, for entrance into the several faculties, to be held in Toronto early in June. This examination has advantages of which intending students should be aware.

Surgical Pathology.

THE PRACTICE OF EVISCERATION IN ABDOMINAL SURGERY AND SHOCK—AN EXPERIMENTAL AND CLINICAL STUDY.

BY DR. LOUIS TIXIER.

THIS summary is the result of an extended period of study, inspired by M. Bouchert—evisceration in abdominal surgery. The work was prosecuted with the collaboration of M. Geimard in the School of Veterinary Physiology, of Lyons.

The complete work occupies 350 pages, with illustrations, diagrams and tracings, showing the effects of intraperitoneal operations on the respiratory and vascular systems. The conclusions are somewhat at variance with those of others, inasmuch as it is recommended that intraperitoneal operations be performed with as much speed as possible; in fact, that success largely depends on rapidity.

The conclusions arrived at are the following:

Evisceration is the displacement outward of the abdominal contents, which might be denominated "exenteration."

Evisceration may be but momentary, and generally should not occupy more time than the condition for which it is performed.

It may be prolonged or continued when it is partial.

It may be traumatic or post-operative.

Indications for it are variable.

(a) *Momentary Evisceration.* In contusions of the abdomen, sometimes it may be easy.

First. It is our only resort when certainty as to the presence or absence of perforation is desirable. In delayed cases it may become a dangerous and difficult manœuvre.

Second. In penetrating wounds of the abdomen it is indispensable to determine the situation and extent of penetrations.

When the opening is small and evisceration is early, there is not much danger. In all cases, especially where deep laceration is expected, the examination should be thorough. It is only when adhesions are firm and leakage arrested that we should desist.

(b) *Traumatic Evisceration.* In these cases reintegration of the damaged extrusion should be effected, the parts restored, and a Mikulicz drain inserted.

Third. *Intestinal Occlusion.* In chronic cases of this character it is rarely necessary to eviscerate, because, with the hand on the

abdomen, we may usually determine the site of the stenosis. But, if necessary, we should not hesitate to turn the intestines out, as the inflammatory action is languid and permits of moderate exposure and manipulation.

In acute, intestinal occlusion evisceration promptly and definitely decides the situation of the trouble. But, unfortunately, in such cases serious symptoms may be present—cardiac collapse, dyspnea, profound intoxication, the peritoneum in an irritable and inflamed condition, the intestine inflated, persistent vomiting, etc., all of which constitute a redoubtable condition.

It can only be permitted in cases seen at an early stage. In neglected cases of intestinal obstruction, attended with great exhaustion, evisceration is quite out of the question, and we must be contented with making an artificial anus.

In such cases, we can rarely differentiate strangulation from invagination, but in all cases, when it is suspected that the intestine is gangrenous and there is fecal escape, the parts must be widely opened.

Fourth. In Peritonitis. Evisceration is generally contraindicated in this state, as the reflexes are hypersensitive to the slightest irritation. It is therefore only when peritonitis is localized that evisceration can be considered. When there is a small perforation it would appear proper to withdraw the bowel and repair it; but not in advanced peritonitis, for the shock may be too great, and hence, we must be content with a gauze drain, leaving the parts widely open for escape of the lethal elements.—*Poncet*. According to Jaboulay, evisceration may accomplish good results in cases of peritoneal tuberculosis with free ascites.

Fifth. In gynecology, thanks to Trendelenburg, evisceration is rarely necessary.

In cases of reintegration after laceration or gangrene of the bowel in hernia, and other condition, it may be necessary.

(c) *Prolonged Evisceration* may ensue from an accident, or by intervention.

Important details to observe in the operative manual of evisceration:

First. Preliminary precautions such as the proper preparation of the patient. Preparation of the room for operation. The temperature of the air should be raised to 80 degrees. It should be humid, and, of all things, care should be taken not to chill the patient. Asepsis should be always humid. This diminishes vaso-motor dilatation of the herniated intestine. We have the greatest trouble with dry asepsis; it interferes with exosmosis and is most conspicuous when we employ dry napkins.

Finally, Management of the Peritoneum. The circulatory and respiratory reflexes, from operative manipulations, offer less gravity when the intestines are enveloped in warm, moist linen, and further, moist dressings greatly diminish the prospect of subsequent intestinal adhesions and post-operative intestinal occlusion.

Anæsthetics should be cautiously used here, ether being always preferred.

Second. On the Choice of Incision. This may be made in the middle line, above the umbilicus. By this quite complete evisceration is possible, though here reintegration may be difficult.

Third. The intestines should be turned out quickly in one mass, and not in segments, in order to prevent irritation of too great a surface.

Fourth. Reintegration of the extruded intestine is always a delicate, and sometimes a difficult, procedure. The use of force must in all cases be avoided, as it often determines the most serious disturbance of the reflexes. Reintegration may be facilitated by lavage of the stomach, after the method of Madelung, Rehu and Kummek, or temporary enterostomy.

Fifth. Closure of Abdominal Walls. Above all things, we must terminate our operation as quickly as possible; generally one plane of through-and-through suture suffices; though if sepsis be feared we use drainage.

Sixth. Consecutive Care. An eviscerated patient always suffers from great shock, and hence we must be on our guard for collapse and meet it with appropriate remedies, as ether, caffeine and serum injections.

The dangers of evisceration are numerous. One of them is a well-known sequel of events common to every species of laparotomy—adhesions between the intestines, rupture of the cicatrix, post-operative eventration. The others are peculiar to the operation. The greatest of all dangers is shock. The essential character of this state is an *ensemble* of functional troubles of the organs of respiration and the circulation. This is produced by the peritoneal reflexes, and may readily be brought about experimentally.

The respiratory reflexes impress the arterial pressure, the heart and pulse.

Invariably, we notice in the animal anæsthetized, after the abdomen is opened, a fall of the arterial pressure, with a weakening of the pulse.

The respiration becomes shallow and irregular. This is powerfully influenced by the state of the peritoneum.

When the peritoneum is healthy the vascular and respiratory organs show no signs of disturbance for from six to ten minutes after evisceration. Beyond this period the peritoneum becomes more and more irritable. The divers functional troubles are more or less independent of each other; as, for example, in some we may have evidence of a profound vascular depression without pulmonary implication, and *vice versa*.

The surgical deductions which we derive from these physiologic disturbances are extremely interesting.

1. In all intra-abdominal interventions we must fear the effects of peritoneal irritation, the redoubtable reflexes of which reduce the patient to a state of shock.

2. The dangers of infection we may obviate, but the nerve phenomena resulting from reflex irritation of the peritoneum cause a state of great gravity.

3. In the healthy individual the danger of shock in evisceration is slight, provided we do not occupy more than ten minutes.

4. In patients in whom the peritoneum is diseased the danger is vastly greater.—*Lions Med.*, Dec. 20, 1897. T. H. M.

A FEW BRIEF NOTES ON THE MORBID ANATOMY OR ESSENTIAL ELEMENTS OF TRUE TUMORS.*

IN the preceding sections of the study of tumors or tumor-like formations, having dwelt chiefly on the clinic features and similar characters of heterogenous masses, in many particulars bearing a close resemblance to neoplastic elements, it now remains, with the limited space at our command for the remainder of this year, to enter on, as fully as possible under the circumstances, the subject of true tumors; the benign, as is generally understood; the malignant and that large class, which both histologically and clinically occupies middle ground, the mixed.

Here, at the threshold of our undertaking, the pertinent question is pressed on us—What is a tumor anyway?

This would seem a question easy of solution and readily answered by any tyro in surgery. It is one, however, which has not been answered yet, although there are endless definitions; for, many phases of pathologic transmutation or degeneration are wanting in the physic features of what would support the derivation of the term; inasmuch, as there is no augmentation of volume, but a destructive advance and a final obliteration of the organ or structure first seized on.

Nevertheless some working scheme, as a nosologic basis, must be adopted, though the usual definition is rather relative than positive.

This confusion and obstacle were fully realized by Delbet in the opening chapter of his and Le Dentu's late superb and exhaustive work, when he declared, "that the study of neoplasms is one of the most obscure and difficult in the whole range of pathology, for while the immortal discoveries of Pasteur and his disciples scattered far and wide a brilliant light on a number of maladies, neoplasms remain enshrouded in an impenetrable obscurity, as, in spite of the accumulated efforts of many, we yet know nothing definite of either their pathology or etiology. Our knowledge is limited to an acquaintance with their evolution and morbid anatomy only."†

* Extract from series on "Tumors," *Medical Times and Register*, Oct. 17th, 1897.

† Pierre Delbet, *Traite De Chir.*, Par. M. M. Le Dentu et Delbet. Vol. I., p. 393, 3.

Ranvier defined a tumor as "any new mass, constituted by a new formation, manifesting a tendency to persistent increase." To this Heurteux added: "Any or all masses composed of new elements, having a tendency to increase independently of inflammatory action." Quenu, one of our latest and ablest authors on oncology, defines a tumor as "a new formation, distinct from all inflammatory processes." Delbet tells us that a tumor is "a neoformation constituted by a new tissue, engendered by super-activity of the cellular elements, which has for its character a typical development more or less permanent." Definitions might be multiplied without in any manner further solving the question; for all which I have seen are defective and vulnerable, and are not one whit more truly descriptive than Percival Potts' plain, laconic and homely description, viz., that "a tumor is a swelling that kills, generally painful, highly vascular, the malignant always ulcerating."

In order to intelligently pursue our studies of the common origin and the natural history of tumors, something like a systematic classification is desirable. This may be reduced to two divisions, viz, a clinic and an anatomic separately; but, for all ordinary purposes, the latter will suffice, except when we commence to separate in a general way the benign and malignant.

The basis of the division here submitted, will be anatomic and histologic: the classification of the microscopic elements being on the lines of my former teacher, the celebrated anatomist and pathologist, the late Dr. Carl Heitzman. This is the most natural and rational, as it quite entirely conforms with the principles of those investigators, who deny the production of any really new tissue elements in any tumor, contending, as Green puts it, that "there is no element foreign to the normal tissue cells in any growth, as the prototype of all may be found in the healthy tissues of the body."

Cohenheim's doctrine of the embryologic origin of tumors has made its impress on the classification of many modern authors; but, as the German pathologist's theories have not received the unre-served support of the greater number of authorities and are in direct conflict with Virchow's views and Sir James Paget's conclusions, it has been decided to submit such an arrangement here of the various groups, as will deal particularly with anatomy, speculation and theorizing aside, thus steering clear of conflicting conclusions on the question of what part, if any, the primordial structures the mesoblast, the epiblast, the esoblast, and the blastemic structures play, as etiologic factors in fetal existence. T. H. M.

DR. W. B. THISTLE is taking the house at present occupied by Dr. Peters, on College Street, as soon as vacated.

DR. GEO. A. PETERS, we understand, intends building this summer on College Street, next door to the Bible House, in the Irving Walker property.

Pharmacology and Therapeutics.

PERONIN, A SUBSTITUTE FOR MORPHINE.

THE name "Peronin" has been given to a salt of the formula $C_{24}H_{27}NO_3, HCl, C_{17}H_{18}NO_2O, C_6H_5, CH_2, HCl$. It is in the form of a voluminous white powder, easily soluble in water, and insoluble in alcohol, chloroform, or ether. It is intended as a substitute for morphine.

According to the investigations made thus far by Drs. Von Mering, Schroeder and Nockus, peronin acts somewhat weaker than morphine, but, on the other hand, exhibits the unpleasant by-effects of the latter in a far less degree. Its use is particularly recommended in the troublesome coughs of phthisis and bronchial catarrh; and in asthmatic affections, as well as in rheumatic and neuralgic pains, it also exercises an excellent, calmative effect.

The dose of peronin is about two or three times greater than that of morphine. A single dose would therefore be from 0.02 to 0.04 gm., the maximum single dose 0.06 gm., and the maximum daily dose 0.2 gm.

Dr. Schroeder ("Therap. Monatsh," XI, p. 4) has used it in eighteen cases of phthisical coughs in patients of both sexes, and compared its effects with those of cocaine. He gave it for seven days in constantly increasing doses of from 0.02 to 0.4 gm., and found that the irritation causing the cough was in the majority of cases immediately alleviated. Expectoration was, as a rule, not affected, nor was any gastric disturbance observed. In all cases, peronin induced a better and calmer sleep, without causing any preliminary excitement. In a few exceptional cases, after larger doses of the drug had been given the patients complained the following morning of headache and general lassitude, which symptoms, however, are much more frequently observed to follow the use of morphine.

Since peronin is almost as bitter as morphine and codeine, it is recommended that it be given in pills or dissolved in syrup or in sweetened water. The following are said to be good formulas for its administration:

1. Peronin 0.3 gm.
 Powd. extract licorice,
 Powd. licorice root of each sufficient.
 Make 30 pills. Dose: Two to four pills at night.

2. Peronin 0.5 gm.
 Distilled water 100 gm.
 Dose: Teaspoonful at night.
3. Peronin 0.1 gm.
 Distilled water 150 gm.
4. Peronin 0.3 gm.
 Alcohol 5 gm.
 Distilled water 50 gm.
 Syrup 100 gm.
 Dose: Teaspoonful three times daily.

MENTAL SUGGESTION.

BY S. HERBERT BRITTON, M.D.

EVERY doctor knows from experience something about the power of the mind over the physical functions, for all of us use mental suggestion unconsciously every day. I have recently been reading Hudson's "Law of Psychic Phenomena," and I find it a wonderful book. I believe it is the duty of every physician who desires to keep abreast of the times to read this book. I first read a most fascinating book entitled "Hypnotism Up To Date," by Sydney Flower, LL.D., of Chicago. This book sought to elevate the science of hypnotism above the proverbial country schoolhouse exhibition of psychological wonders, to rescue it from what we might call the "Black Art," and give it a wider and more worthy scope. Then, too, Mr. Flower has dispelled much of mysticism which has always hung around the subject of hypnotism. He should be honored for that; indeed, he has made this to appear to be only a simple God-given power to anyone who is worthy of using it right. He has made it a power for good of universal application. Thanks to Sydney Flower.

Now, I noticed not long ago that Mr. Flower seems to have no doubt, judging by an article of his in his magazine, that the time to educate children against bad habits and in fact carry on a great part of their instruction, is while they are *asleep*. This was a new idea to me, but I could not think a man who could write such captivating articles as Mr. Flower could be very much wrong. So I resolved to try it at my first opportunity.

My little three-year-old daughter had, since an attack of whooping-cough, a most troublesome incontinence of urine. We gave her drugs, implored her, punished her (something I am sorry for), and did all that we could to cure her. It seemed that everything was useless. I had concluded that time alone would cure her, but after reading Mr. Flower's article on the education of children during

their sleep, I took courage. I talked to her during a quiet sleep, and suggested "Blanche will not wet herself any more." I repeated this in her ear very distinctly, and said it over and over. I also suggested that she would not wet the bed any more. I told her how sorry her mamma and papa were when she did it, etc. Now, it must be remembered that this habit was so bad that the child was at no time in the day presentable when anyone wanted to see her. Her mother was invariably compelled to see to her clothes before allowing her to see them. I was therefore very much astonished to notice soon after the first treatment that she did not repeat the soiling of her clothes. "But," I said, "it must be a coincidence," and let the matter drop for that time. The freedom from enuresis continued from day to day, and I, of course, continued my treatment at intervals, and must say that it is now over two weeks since she has been troubled in the least. Here was an instantaneous and complete cure.

I am inclined to ask, "Is mental suggestion so powerful as this?" I really think, if it is powerful with any, it would be so with children. But I shall await the result of other trials. Yet I can never cease to wonder at the above result. It, of course, might be called a coincidence; but even then it is a wonderful coincidence. I advise any physician who reads this to try this matter for himself.

I believe we are only on the threshold of psychology, and that the next ten years will develop far greater wonders than we have yet seen in a psychological line. Let us see the results of your experiments, whether they fail or not. Failures are sometimes as valuable as successes, in some respects. I will say, while I am on this subject, that I am experimenting, as I have opportunity, in this matter of mental suggestion, and that I recently made an inglorious failure to hypnotize an old female neurasthenic who had refused to let anything cure her, and that I promptly reported the same to the *Hypnotic Magazine*.

Personally, I want to say in conclusion, that I am very much inclined to believe in telepathy as a means of inter-communication between the subjective minds of people. That is, I am inclined to believe Mr. Hudson's hypothesis explains mental phenomena most completely, and that we are only in the infancy of psychology. At any rate, hypnotism as a therapeutic measure has come to stay, and it cannot be ignored by the medical profession. As I have said before, when it comes to the fact that a patient can be blistered with a postage stamp, we ought to study the new psychology. Then anyone who will read up on the subject can see for himself that the method of hypnotic suggestion is by far the most potent of any treatment yet devised for the drink habit and the morphine habit, etc.—*Exchange*.

A. J. H.

DR. CHARLES CUTHBERTSON has given up his Bay Street office entirely, and will concentrate his work on Wilton Crescent.

Public Health and Hygiene.

PROVINCIAL BOARD OF HEALTH.

THE Provincial Board of Health met at Dr. Bryce's office, April 19th, at 10.30 a.m. Dr. Macdonald (chairman), Dr. Bryce (secretary), Dr. Cassidy, Dr. Vaux and Dr. Kitchen were present.

After the minutes of the first quarterly meeting had been read and adopted, the Secretary announced that the American Public Health Association would meet at Ottawa on September 27th of this year.

Correspondence was then read relating to the sanitary condition of Cardinal and Iroquois, on the new Williamsburg Canal. President Geo. F. Benson, of the Edwardsburg Starch Company, drew the Board's attention to the state of affairs at Cardinal, where Davis & Sons, large employers of labor, were engaged upon the new cutting. The large influx of navvies had caused a great deal of overcrowding, and the absence of proper sanitary conditions made Cardinal a dangerous place during the hot season. In his letter Mr. Benson said: "I wish to call your attention to the fact that in one house that I know of there are practically in the neighborhood of twenty people, over half of whom are navvies, whom a man with an already large family has undertaken to board. In this same house, and cooped up in a comparatively small room, there are four double beds accommodating eight men. One of these men has the measles, and the smell of the room and building is most objectionable."

Continuing, Mr. Benson said, "Measles, combined with whooping cough, had become epidemic in the neighborhood. Country people did not consider measles dangerous, and took no trouble to isolate the cases. If by any chance small-pox were to break out, the situation would be serious."

Dr. Bryce and Dr. Vaux were appointed a special committee to deal with the matter. An effort will be made to locate the navvies in tents during the summer time.

The water supply at Iroquois, with which the Board has been dealing for some time, was discussed by the Board in Committee of the Whole. A letter was read stating that the Water Supply Company had not yet taken any steps to improve the supply, which was still taken from the old canal, which drained five miles of territory, several villages and manufactories. A sample taken from the canal in mid-winter showed much impurity, which would be increased when the ice melted and the surface water ran in. Then the screws and wheels of steamers would stir up the animal

matter in the summer time and the warm weather would cause a great increase of bacterial life, and might lead to a serious outbreak of disease.

After a lengthy discussion, the following resolution was adopted :

"(1) That the Council of the village of Iroquois take such steps as shall cause at once the extension of the intake pipe to the pure waters of the St. Lawrence.

"(2) That in view of this urgency, the Local Board of Health of Iroquois be instructed to at once give formal notice to the Water Company to supply, within a definite reasonable period, the town with a safe public supply under the Act, requiring it to abate nuisances and remove insanitary conditions, as the Board is empowered to do under the Ontario Health Act.

"(3) That the Local Board be notified, in case action is not taken by it, to have this danger to the public health removed within a reasonable period; that the Secretary of the Provincial Board of Health will be instructed to have such legal steps taken under the Ontario Health Act to have the insanitary condition above referred to removed, as may be found necessary in the public interest."

A report on a proposed water works system for Rat Portage was considered. The intake pipe is to extend out 1,000 feet into the Lake of the Woods, where the water has been proved by analysis to be very pure. At present, and until the new system is constructed, the town water supply is pumped from above the town by a hand-pump.

An outbreak of diphtheria was reported from Parry Sound, and differences of opinion between physicians as to the diagnosis of the disease had led to conflict between the Medical Health Officer and the attending physicians. It was the opinion of the Board that, when a difference of opinion arises, in such cases the bacteriologist should be called on to decide the true nature of the disease.

The City Council of Chatham and the Township Council of Delaware both protested against the pollution of the River Thames by London sewage. Dr. Bryce explained that the proviso by which the sewage works of London were approved of, set forth that London should put its sewage, when the works were completed, on a sewage farm; but in the meantime, during the construction of the system, London was obliged to use the river.

At Berlin the Board of Health and Council are at loggerheads over the employment of an inspector. The regular officer appointed by the Council has too many other duties to perform to permit of efficiency. The Provincial Board supported in the most positive way the position of the Local Board, and drew attention to its right to employ a proper inspector, and send in the account to the Berlin Council.

The question was asked from Essex Centre as to the length of

time scarlet fever cases should be isolated. It was the opinion of the Board that authority under the Act to state the length of time was conferred on the Medical Health Officer in the first place; secondly, on the Local Board; and lastly, on the attending physician where a Medical Health Officer was not appointed.

Secretary Bryce was appointed to visit Leamington, and report upon the best method of securing proper drainage and sewerage.

The action of Dr. Porter, of Chicago, in shipping the body of a scarlet fever victim to Toronto, where an outbreak occurred, came up before the Board. Dr. Arthur R. Reynolds, the Commissioner of the Chicago Health Board, in writing about the occurrence, said Dr. Porter had evidently betrayed his confidence in ascribing the cause of death to heart failure, when the real cause was scarlet fever, heart failure contributing.

H. C. Doan, V.S., wrote from Zurich in reference to a disease in cattle, supposed to have been caused by eating turnips. The disease had died out when the farmer ceased feeding turnips to the cattle. The Secretary reported that experiments, made in the laboratory of the Board, had not shown that the turnips were poisonous.

Correspondence was read from the Local Board of Health of Goderich, regarding analysis of specimens of urine, and complaining of neglect to send reports. The opinion was generally expressed by members of the Board that the bacteriologist of the Board should not be expected to do analytical or bacteriological work, unless the same related to public health.

The Board met April 20th, at 10.30 a.m. Among the correspondence submitted was a letter from W. J. Hodgins, of Bonfield, near North Bay, regarding the recent outbreak of diphtheria in that village. Mr. Hodgins was able to say that the disease was now confined to his own house. It had been brought to them by a young school teacher who came from Mattawa. The epidemic was an extremely interesting one, as it had been started by a seemingly mild case, and from it three deaths and several serious cases had resulted.

A communication from Mr. C. R. Sing, of Meaford, was read, submitting a plan for a proposed new cemetery for the town. The Board approved of the plan, and will authorize Mr. Sing to lay out the cemetery.

An analysis of Lake Erie water, near the village of Port Colborne, was considered preparatory to the laying by the Council of a water works system. The water was found quite pure enough for use, and the plan approved of, subject to the Board's satisfaction regarding the position of the intake pipe.

The artesian wells of Mount Forest were next discussed, and the analysis of their water was found extremely satisfactory. It was resolved that the water could be used subject to the proviso that the location of the wells be shown to be free from the danger of surface pollution on subsequent analysis.

From the village of Hintonburg, near Ottawa, came a plan and communication regarding a proposed new sewerage system. The sewage, according to the plan, will be piped to a point beyond the Chaudiere dam, and will therefore not be dangerous to the city of Ottawa. The village, however, is also formulating a water works system. The matter was left for action to the Committee on Sewerage.

A deputation from Guelph, consisting of Mayor Hewes, Alderman Howard, Alderman Kennedy and City Engineer Hutcheon, was present in the afternoon, and exhibited plans of a proposed sewerage system for the city. It is proposed to filter the sewage through sand. The consideration of the plans was deferred.

Mr. Van Buskirk, of Stratford, was present with plans for a proposed change in the disposal of sewage at Stratford. It is proposed to erect a couple of precipitation basins with subsequent filtration of the effluent through a bed of coke breeze three feet in depth; the sludge to be removed and placed on agricultural land.

The Board approved of the system, subject to the proviso that the Council should supply sufficient assistance to guarantee the efficiency of the filtration.

The quarterly report of the Board was presented by Dr. Bryce. The answers to a set of questions sent out by the Provincial Board to the Local Boards were included in the report. He stated that, generally speaking, the Boards send in their accounts to the Local Councils, and that very seldom was any grant made to them at the beginning of the year; 32 per cent. of the Local Health Officers reported that they received salaries, though most of them were merely nominal ones; 71 per cent. of the replies stated that the Medical Health Officers were appointed annually, and 10 per cent. were appointed at pleasure. The membership of the Boards was now composed of ratepayers, who are not members of the Local Council, and so the Local Boards had become more independent in their action than formerly. These answers are from 285 replies received to circulars sent out to 479 Medical Health Officers.

Speaking of the working of the Ontario Health Act, during the fifteen years since it came into force, Dr. Bryce said that, as far as the organization of effective public health work in the Province was concerned, the results were somewhat disappointing, though not discouraging. One cause of this, upon which he laid stress, was the fact that the Medical Health Officer is, in most cases, appointed annually, and is, therefore unable to take forceful measures, as he might endanger his reappointment. In fact, the method of appointment, the length of tenure and the salary paid made the position of a Medical Health Officer a simple anomaly and absurdity. As remedies for these evils, he recommended: (1) The enlarging of the sanitary district, so as to permit adequate payment for services; (2) the training of the officers in the various branches of applied science; and (3) permanency of tenure of office.

The Board met April 21st, 10.30 a.m.

The Guelph sewerage plans were approved of, with the proviso that the sewage effluent be kept in a satisfactory condition.

Dr. Cassidy read a report on the comparative vital statistics of Toronto and Montreal, in Canada, and Chicago and Philadelphia, in the United States.

The report was adopted.

The Rat Portage system of water works was approved of, provided the intake pipe be extended southward into the Lake of the Woods 1,000 feet, and farther, if the necessities of the case should require it later on. No sewers are to be allowed to discharge in this vicinity.

The Town Council of Lindsay requests permission to extend a sewer pipe into the Scugog River, which runs through the town. The request was granted on condition that the new sewer pipe be laid inside the old brick sewer, and made to discharge a considerable distance down the river.

A report by Mr. Mackenzie, bacteriologist, was read, asking that an assistant be appointed in the laboratory. The report was adopted.

Correspondence was read relating to an outbreak of measles at Collingwood, and the Secretary was instructed to send a reply to Dr. Stephens, of Collingwood, telling him to inform the Local Board and Council that if sufficient funds were not supplied to the Local Board to deal with the outbreak, the Provincial Board would take the necessary steps to stamp out the disease at the expense of the municipality, as provided under the Ontario Health Act.

In connection with an outbreak of measles in Newcastle the Secretary was instructed to take the necessary action to prevent spreading.

The complaint from the Napanee Board of Health regarding the town dumping ground was found to be well grounded. The Secretary was instructed to request the Local Board to obtain a dumping ground in a more sanitary position.

The second quarterly meeting was then declared adjourned.

J. J. C.

**REGULAR MEETING OF STATE BOARD OF HEALTH,
LANSING, APRIL 8, 1898.**

THE State Board of Health met in regular session at the office of the Secretary at Lansing, and the meeting was called to order by President Frank Wells, of Lansing. The other members present were: Judge Aaron V. McAlvay, of Manistee; Prof. F. G. Novy, of Ann Arbor; and Secretary Henry B. Baker.

The regular business of auditing bills and accounts was transacted.

This being the Annual Meeting and the time for the President's address, Mr. Wells thanked the members of the Board for the

courtesies they had shown him during his service as President; thanked them for the aid they had given him in connection with his duties, and congratulated the members on the important advances they had made. Continuing, he said: "It is a recognized law that bodies in motion move through lines of least resistance, that a road once travelled is more likely to be again travelled than a new one in a similar direction, and that we are all prone to get into ruts, from which it is difficult to extricate ourselves. It was perhaps with this knowledge in view, and with a hope that the attention of this Board might sometime be called to special lines of work, which otherwise would have been overlooked by it, that an address from the President of the Board was made a feature of each annual meeting. In complying with this requirement to-day, I find it impossible to discover any ruts from which the Board should be pried out, or roads they should discontinue to travel." He congratulated each member on the regular and special meetings he had attended during the year. The greater part of the President's address related to the outbreaks of typhoid fever along the St. Clair and Detroit Rivers—at Port Huron, St. Clair, Marine City, Detroit and Wyandotte—especially the recent one at the city of St. Clair. He was emphatic in his belief that the Board should enter upon a more thorough investigation of the waters of St. Clair River, with a view to ascertaining, if possible, where, when, under what circumstances, and how the river is contaminated; whether the contamination is intermittent or constant; what is the result of dredging the sewage sludge out of Black River at Port Huron; and whether the contaminations which constantly enter the river at Port Huron find their way into the water supplies of the cities along the river; and under what circumstances such contaminating material finds its way into the water supply of Detroit. The questions are of vital importance to the citizens residing along the St. Clair and Detroit Rivers, and such investigations would be of inestimable value. The President said he knew that the funds at the disposal of the State Board were inadequate, but he hoped that the Board would see its way clear to pushing the investigation at least far enough to learn the importance of such work, when, if it proves to be as important as he thought, the Legislature would undoubtedly do as they have in other States, make provision for having the investigation properly made.

The Secretary of the Board mentioned that he had had several samples of water from the river examined—from the river as it leaves Port Huron, from the river opposite the intake at St. Clair, from the water works in St. Clair, from a tap in St. Clair, and from the river as it leaves St. Clair. All of the samples were found to be contaminated by disease-producing germs, and all but one promptly caused the death of animals, and that one made them sick.

For the purpose of supplementing this work, he had urged the Mayor of Marine City and the President of the village of Algonac to act under Act 43, laws of 1897, for having the water at their respective places tested at the university at cost. He had also

urged the Engineer of the Detroit Water Works and the Health Officer of Detroit to have daily bacteriological tests made of the water supplied to that city. He also hoped that the State Board would take some action.

On motion, the Board voted to authorize the expenditure for such investigation of a sum not to exceed \$200.00, to be expended at the discretion of the President and Secretary, if it is found practicable to make the investigation as outlined.

The President and Secretary reported progress in the different lines of preparation for the Quarter-Centennial Celebration of the establishment of the State Board of Health, to be held in Detroit, August 9th, 10th, 11th. It is proposed to make this meeting the most important sanitary convention ever held in Michigan.

Dr. Novy, in behalf of the special committee to whom was referred the question of Teachers' Sanitary Bulletins, reported that the proposition was an excellent one, and the educational value of such bulletins will be great. It is proposed that these bulletins be issued to teachers, with a view to keeping the educational forces throughout the State in constant touch with the results of recent sanitary research.

Prof. Novy, in behalf of the special committee to whom was referred the question of the relative efficiency of disinfection by sulphur fumes and by formaldehyde, made a written report of a very thorough experimental investigation, which will make room-disinfection much more easy and less destructive of valuable articles. His work included twenty-six room-disinfections, and the use of five thousand specimens of twenty different species of germs that were exposed and afterward cultivated. The disinfection was performed in a specially-prepared room, containing 1,000 cubic feet of air space, and as near as practical air-tight. He found that when 150 c.c. (about 5 fluid ounces) of commercial 40 per cent. formalin were distilled into a room containing 1,000 cubic feet of air space, all moist disease germs were killed. Heretofore, obstacles to the general use of formaldehyde have been the great cost of the apparatus for using the paraform or the formalin for regenerating formaldehyde, and the unreliability of the action of apparatus for generating it direct from wood alcohol. Professor Novy has devised and used a very simple and inexpensive apparatus for distilling commercial formalin into a room through the keyhole. Formalin can be purchased for about fifty cents a pint. Five fluid ounces will suffice for the disinfection of 1,000 cubic feet of air space. The disinfection of the room can be effected without entering the room, the apparatus being outside the room, where it can be watched, and the danger of fire inside the room entirely obviated. Dr. Novy's work is very valuable. His report will be printed in pamphlet form and widely distributed, in order to educate the teachers and people of Michigan in the methods for such disinfection. This work will be an important step by the State Board, because of the simplicity, cheapness and effectiveness of the method.

**REPORT OF DEATHS FROM CONTAGIOUS DISEASES IN ONTARIO FOR THE MONTHS OF
FEBRUARY AND MARCH, 1898.**

PREPARED BY P. H. BRYCE, M.A., M.D., DEPUTY REGISTRAR-GENERAL.

FEBRUARY, 1898.

Total Population Reporting.	Total Municipalities Reporting.	Total Deaths Report d.	Scarlatina.	Diphtheria.	Rate per 1,000 per Annum.	Menses.	Rate per 1,000 per Annum.	Whooping Cough.	Rate per 1,000 per Annum.	Typhoid.	Rate per 1,000 per Annum.	Tuberculosis.	Rate per 1,000 per Annum.
1,450,768 67%	553 74%	221	15	38	0.3	9	0.07	10	0.07	10	0.07	133	0.1
													1.0

MARCH, 1898.

1,462,321 64%	501 67%	197	26	27	0.2	4	0.03	1	0.005	10	0.08	129	1.0
------------------	------------	-----	----	----	-----	---	------	---	-------	----	------	-----	-----

Population of Province 2,263,492
Municipalities of Province..... 745

Proceedings of Societies.

TRINITY MEDICAL ALUMNI ASSOCIATION.

THE sixth annual meeting of the above Association was held on the 6th of April, 1898, in the Education Department, Normal School, Toronto. The president, Dr. Elias Clouse, in the chair; Dr. H. C. Parsons, Secretary.

Routine business was first taken up, including the consideration of reports from the Secretary-Treasurer and Auditor, and the election of officers, which was followed by Dr. Vaux, jun., of Brockville, giving an abstract of his thesis which had been awarded the Alumni gold medal. The subject of the thesis was "Indol, Indican and Indigo-blue."

Dr. F. Le M. Grasset next presented a very practical paper, entitled, "Some Surgical Diseases of the Rectum." The essayist, among other conditions, touched upon fistula, prolapse, and dwelt at some length on hæmorrhoids. Considerable discussion followed especially over the treatment of the latter. Opinion seemed pretty evenly divided on the merits of the ligature and the clamp and cautery, respectively.

The afternoon session opened with a paper by Dr. Henry Howitt, Guelph, on "Some Points in Abdominal Surgery Relating to Intestinal Obstruction." The paper was well received, and elicited considerable discussion.

Dr. Leroy Milton Yale, of New York read a very instructive paper on "The Care and Modification of Milk for Infants."

Dr. Charles G. Stockton, of Buffalo, after passing some eulogistic remarks on Dr. Yale's paper, presented his own on "The Nature of those Joint Affections usually called Rheumatism." It was regrettable that time would not permit discussion of this able paper.

The meeting now adjourned to attend convocation at Trinity University for the conferring of medical degrees.

The evening session opened at 8.30 at the Rossin House, Dr. Elias Clouse, President, in the chair. Nearly one hundred members, with their guests, sat down to a superb banquet. The occasion was enlivened by Glionna's orchestra, and by Mr. Edwin Rood, an entertainer from New York. When justice had been done the viands and the toast to the Queen was drunk, the audience heartily singing the National Anthem, the President presented his address, in which he briefly recalled reminiscences of college life in Old Trinity, especially of his own class. He also touched upon the uninterrupted progress of the Association, its

motives and objects, and upon the trend of public opinion, as manifested at present by an increasing demand for gratuitous medical services, and the disposition on the part of legislators and the lay public to deprecate medical legislation. Next, the toast to "Canada," was proposed by the first Vice-President, amidst the strains of "The Maple Leaf Forever." Mr. E. E. Sheppard responded in his usual happy way. The President now proposed the toast to "Our Guests," the orchestra playing "The Star Spangled Banner." This brought to their feet Dr. Yule, of New York; Dr. Stockton, of Buffalo, and also Dr. O'Reilly, of Toronto. The next toast was to the President-elect, Dr. Howitt, of Guelph, the audience singing, "For he's a Jolly Good Fellow." Dr. Howitt responded, thanking the Association for the honor they had done him in electing him President. "Old Trinity" was responded to by Dean Geikie, in a characteristic speech, Dr. Bingham and an undergraduate responding for the graduates and undergraduates, respectively. The toast to the "Ladies" was responded to by several gentlemen of extensive knowledge of the subject. Then the audience joined hands around the room and, amidst the strains of the orchestra, every voice was raised in "Auld Lang Syne," and thus ended by consensus of opinion the most successful year that the Association has ever enjoyed. E. C.

DR. BEAUSOLEIL, President of the Canadian Medical Association, has received from the French Government the decoration of Officier d'Academie, in recognition of his services to education.

THE new emergency Branch of the Toronto General Hospital has been located on Bay Street, just below the Robinson House. Permits have been issued for the necessary alterations to the buildings now occupying the site.

DR. J. HUNTER, of Dovercourt Road, expects to be able to return from California, where he has been all winter attending a brother who was very ill, some time this month. The doctor will resume practice at once in the west end of Toronto.

AN aseptic vaccine bulb, which we think is so great an improvement as to warrant special mention, has been invented by Dr. Seel, of the Pocono Biological Laboratories. It is simply a miniature Sternberg bulb. Only one end is sealed, so that heat cannot destroy the vaccine, as it is very liable to do when both ends are sealed—*e.g.*, in the tubes of the New York Board of Health. There is no need of blowing the vaccine through a rubber tube, with the possibility of infecting it, not by the expired air, but by the sputum, moustache, etc. For using, the point is broken off and the vaccine forced out by the flame of a match applied to the bulb, or even by the heat of the hand. It is a happy thought.—*Phila. Med. Jour.*

The Canadian Journal of Medicine and Surgery

J. J. CASSIDY, M.D.,
EDITOR,

69 BLOOR STREET EAST, TORONTO.

W. A. YOUNG, M.D., L.R.C.P.LOND.,
BUSINESS MANAGER,

145 COLLEGE STREET, TORONTO.

Surgery—BRUCE I. RIGGAN, M.D., C.M., McGill University; M.D. University of Toronto; Surgeon Toronto General Hospital; Surgeon Grand Trunk R.R.; Consulting Surgeon Toronto Home for Incurables; Pension Examiner United States Government, and F. N. G. STARR, M.B., Toronto, Lecturer and Demonstrator in Anatomy, Toronto University; Surgeon to the Out-Door Department Toronto General Hospital and Hospital for Sick Children.

Orthopedic Surgery—B. E. MCKENZIE, B.A., M.B., Toronto, Surgeon Victoria Hospital for Sick Children; Clinical Lecturer, Orthopedic Surgery, Toronto University; Assistant Surgeon, Ontario Medical College for Women; Member American Orthopedic Society; and H. P. H. GALLOWAY, M.D., Toronto, Orthopedic Surgeon, Toronto Western Hospital.

Oral Surgery—E. H. ADAMS, M.D., D.D.S., Toronto.

Surgical Pathology—T. H. MANLEY, M.D., New York, Professor of Surgery, New York College of Clinical Medicine, New York, etc. etc.

Medicine—J. J. CASSIDY, M.D., Toronto, Member Ontario Provincial Board of Health; Consulting Surgeon, Toronto General Hospital; and W. J. WILSON, M.D., Toronto, Physician Toronto Western Hospital.

Gynecology and Obstetrics—Geo. T. McFARLANE, M.D., M.R.C.S. Eng., Chatham, Ont.; and J. H. LOWE, M.D., Toronto.

Medical Jurisprudence—W. A. YOUNG, M.D., L.R.C.P. Lond., Eng., Toronto.

Mental Diseases—EZRA H. STAFFORD, M.D., Toronto, Resident Physician, Toronto Asylum for the Insane.

Public Health and Hygiene—J. J. CASSIDY, M.D., Toronto, Member Ontario Provincial Board of Health; Consulting Surgeon, Toronto General Hospital; and E. H. ADAMS, M.D., Toronto.

Pharmacology and Therapeutics—A. J. HARRINGTON, M.D., M.R.C.S. Eng., Toronto.

Physiology—A. B. EADIE, M.D., Toronto, Professor of Physiology, Woman's Medical College, Toronto.

Pediatrics—AUGUSTA STOWE GULLEN, M.D., Toronto, Professor of Diseases of Children, Woman's Medical College, Toronto.

Pathology—W. H. PEPLER, M.D., L.R.C.P. Lond., Toronto, Demonstrator of Pathology, Trinity Medical College; Medical Registrar, Toronto General Hospital.

Laryngology and Rhinology—J. D. THORBURN, M.D., Toronto, Laryngologist and Rhinologist, Toronto General Hospital.

Ophthalmology and Otolaryngology—J. M. MACCALLUM, M.D., Toronto, Assistant Physician, Toronto General Hospital; Oculist and Aurist, Victoria Hospital for Sick Children, Toronto.

Address all Communications, Correspondence, Books, Matter Regarding Advertising, and make all Cheques, Drafts and Post-office Orders payable to "The Canadian Journal of Medicine and Surgery," 145 College St., Toronto, Canada.

Doctors will confer a favor by sending news, reports and papers of interest from any section of the country. Individual experience and theories are also solicited.

Advertisements, to insure insertion in the issue of any month, should be sent not later than the fifteenth of the preceding month.

VOL. III.

TORONTO, MAY, 1898.

NO. 5.

Editorials.

INTESTINAL OBSTRUCTION.

IN the treatment of marked cases of this lesion the surgeon renders an important service by making an abdominal incision, and removing, if possible, the obstacle to the passage of the contents of the bowels. Recently, at a meeting of the Alumni Association of Trinity Medical College, we listened to a paper on this subject by Dr. Howitt, Guelph, Ont., and were favorably impressed with his methods and the management of his cases. The methods recommended were: Preliminary lavage of the stomach, free

incision of the abdomen, evisceration of the intestines, enveloping them in cloths wrung out of warm water, search for the lesion and removal of the same. Where gaseous distension of the bowel interfered with success, the operator incised the bowel in a transverse direction, to permit the escape of gas, fæces, etc. The wounded intestine was sutured, the eviscerated intestines returned, the operation wound cleaned, and the peritoneum and the abdominal walls sutured. A drainage tube was introduced at the lowest part of the abdominal cavity, protruding through a small opening made in the abdominal wall. This was generally removed in twenty-four hours. Some of Dr. Howitt's operations were done in small rooms in country houses, in which the conveniences were of the rudest description, and yet the results were quite satisfactory. Dr. Bingham, who discussed the paper, observed that in cases of intestinal obstruction the use of enemata was sometimes persisted in for too long a time. He instanced a case in which copious enemata of turpentine and water had been given, which had been retained. On making an incision into the peritoneum the turpentine and water flew up into his face, having evidently escaped through a rent in the intestine.

As an instance of one of the unusual causes productive of intestinal obstruction the writer of this article recalls a case resulting from the compression of the bowel near the ileo-cæcal valve by a large hydatid cyst.

An unusual case of obstruction in the practice of Dr. Barzy, Paris, was recently reported to the Anatomical Society of Paris. The patient was operated on the same night on which he was admitted to the hospital, an artificial anus on the right side being made. He died of syncope three days after the operation. The three most remarkable symptoms in this case were: 1. "Rapid onset of the attack, beginning with a violent pain in the left iliac fossa, extending all over the abdomen; 2. extreme pallor of the face; 3. subnormal temperature, 96.4° , and pulse 120. At the autopsy the viscera were found anæmic, and in the abdomen a reddish mass was found, filling the hypochondriac, lumbar and iliac regions of the left side. The descending colon had been pushed over to the right iliac region, and was the intestine upon which the operation for artificial anus had been performed. The above-mentioned mass was made up of accumulated clots, and, in evacuating them, the gentleman who made the autopsy found, at the origin of the left external iliac artery an aneurism as large as a hen's egg, which had burst

into the abdomen and caused the accidents of intestinal obstruction presented by the patient. Recently, at a meeting of the National Society of Medicine of Lyons, France, Dr. Berard presented a specimen of the intestines of a female patient, who had entered the hospital December 12th, 1897, for intestinal obstruction, lasting twelve days, and particularly acute for five days. Her general condition was precarious, and the cause of the obstruction difficult to diagnose. Dr. Berard performed colotomy with immediately favorable results. On the following day the patient complained of a severe pain in the left side of the thorax. A diagnosis of pneumo-thorax was made, and on thoracentesis, 200 grams of a fetid liquid were withdrawn. Next day an operation for empyema was done, and a sanious fluid, containing small fecal masses in suspension, flowed from the opening.

At the autopsy a diagnosis of diaphragmatic hernia was made: 1.40 metre of the large intestine was caught in an artificial opening situated in the middle of the left leaf of the diaphragm. The hernia appears to have occurred some time after an accouchement, which took place one year before the obstruction. At that time the patient had an attack of orthopnoea, lasting three days, without any intestinal phenomena. On account of the inflammatory accidents it was not possible to say if the hernia had a pleuro-peritoneal sac, or if the intestine was caught in an opening which did not possess a serous covering.

As germane to this subject, and of great practical importance we refer our readers to the interesting work in abdominal surgery done at the School of Veterinary Physiology of Lyons by Drs. Tixier and Geinard, a resume of which by Dr. T. H. Manley appears at page 259 of this issue.

J. J. C.

FORMALDEHYDE DISINFECTION.

EXPERIMENTERS in Europe and America continue to devise new forms of apparatus for disengaging this disinfecting agent. In Berlin, Germany, Schlonmann and Elsner have proved that the disinfecting action of formaline is developed in a more energetic way, when the rooms to be disinfected are filled with an atmosphere of steam. In order to obtain this atmosphere they add to formaline a mixture of water and glycerine, which are vaporized simultaneously with the formaline.

By this method, sterilization is accomplished after three hours' exposure. In this short space of time the experimenters have sterilized pus, a layer of horse dung about half an inch in thickness and cloths soaked in virulent cultures, which were placed in the room. When using this method, it is not necessary to plug the doors and windows.

The essential feature in the Schlonmann method is the disengagement of watery vapor in the state of steam, which brings the active agent formaldehyde into close contact with the objects to be disinfected, and maintains this effect. It is likely also that the formation of paraformal is prevented, and that all the available formaldehyde is distributed through the room, by the agency of the steam, without undergoing solidification.

After experimenting with many different kinds of generators, Dr. Behm, of the Department of Health of Chicago, claims to have obtained good results, by simply causing the vaporization of the 40 per cent. solution of formaldehyde from sheets suspended in the room. We quote from the Bureau and Division Reports, March, 1898: "Ordinary bed sheets were employed to secure an adequate evaporating surface, and these, suspended in the room, were simply sprayed with the 40 per cent. solution through a common watering pot rosehead. A sheet of the usual size and quality will carry from 150 to 180 c.c. of the solution without dripping, and this quantity has been found sufficient for the efficient disinfection of 1,000 cubic feet of space. Of course, the sheets may be multiplied to any necessary number.

"Cultures, both moist and dry, were exposed for five hours in these experiments; some in sealed envelopes and others wrapped in three thicknesses of sheets or folded inside of woollen blankets. Of the former none showed growth after seventy-two hours' incubation, while the growth was but slight in those wrapped in the blankets. Surface disinfection was thorough, while a much greater degree of penetration was shown in these experiments than that secured by any other method.

"The evolution of the gas from the sprinkled sheets is exceedingly rapid, so much so that it behooves the operator to vacate the room in a very few seconds, while, after starting the ordinary generator, he may remain ten minutes or more without serious inconvenience. When the room is opened after five hours, the density of the gas is still so great as to preclude respiration, until after doors and windows have been opened some little time. On

the other hand, the air is respirable, within a very few minutes after the sheet has been removed, and there is no lingering smell of formaldehyde for days after, as is the case where the gas is evolved by the action of heat. This is due to the fact that a minimum of paraform is produced, in the evaporation of the solution in this manner at the ordinary temperature, and this is retained in the meshes of the fabric, instead of being precipitated on surfaces to be slowly converted into the gaseous form through several days."

The increased disinfecting power of formaldehyde, when combined with watery vapor, reminds one of the same feature in sulphur fumigation. It would seem as if the atom of formaldehyde or sulphurous acid required to be carried on the wings of watery vapor and to be absorbed into the meshes of cloth, or be deposited on surfaces, etc., where its bactericidal power is to be put into operation. From the results, obtained by Schlonmann with hot watery vapor combined with formaldehyde, and the equally satisfactory experiments of Behm with cold watery vapor combined with formaldehyde, we may conclude, that the presence of watery vapor is a useful adjunct in disinfecting apartments when the 40 per cent. solution of formaldehyde is used. The extreme simplicity of Behm's method, should its efficiency be completely proved, ought to give an extraordinary impetus to the work of disinfection, and consequently to the limitation or stamping out of infectious diseases.

J. J. C.

TRANSMISSION OF INFECTIOUS DISEASES BY THE ATMOSPHERE.

In *Zeitschr. f. Hyg. u. Infections, Krankh.*, 1897, vol. xxvi., p. 273, E. Germano gives the results of his researches on the resistance of bacteria to desiccation, and consequently on the possibility of their transportation in a virulent condition or the reverse by the atmosphere. After having explained the behavior in the presence of desiccation of the vibrio of cholera, the bacillus of plague, and the bacillus of cerebro-spinal meningitis, the author summarizes the results of all his observations in the following manner:

From the standpoint of resistance to desiccation pathogenic bacteria may be divided into three groups:

1. The first group comprises the vibrio of cholera, the bacillus

of plague and the bacillus of typhoid fever. These belong to the category of fixed viruses, for they offer a feeble resistance to desiccation in dust, in which they disappear almost completely after twenty-four hours. Their transportation by the atmosphere in a virulent condition is no longer admissible. Everything seems to favor the opinion, that the bacillus of influenza and the gonococcus behave in the same manner.

2. The second group comprises the streptococcus, the bacillus of diphtheria and the pneumococcus. They offer greater resistance to desiccation, and this resistance varies with the origin of the culture. Generally, however, we may consider them as fixed viruses, in the sense that their transportation by the atmosphere in a virulent condition does not ordinarily take place. However, under certain conditions, they may act like a volatile virus, that is to say, they may be transported by the air in a virulent condition, a circumstance which would explain the appearance of sporadic cases of erysipelas or diphtheria. Perhaps, also, in certain forms of epidemic pneumonia the pneumococcus becomes a volatile virus.

3. The third group comprises the intracellular diplococcus, the agent of epidemic cerebro-spinal meningitis, which offers a strong resistance to desiccation, and beside which, from the point of view of this resistance, may be placed the bacillus tuberculosis and the staphylococcus. The question of the conditions under which infection by the staphylococcus and tuberculosis may be transmitted by the air is not yet solved. However, if the infection of wounds occurs by immediate contact, one can understand how staphylococci, dried but still virulent, may be transported by the air and fall on a wound or objects in contact with it. With regard to tubercular infection, it had already been concluded from negative experiments on animals, that aerial infection in man is impossible. According to Germano this conclusion is not quite exact, for it is possible that in man, or, at least, in certain individuals, the respiratory passages are more accessible to tuberculosis than the respiratory passages of animals.

J. J. C.

THE MEDICAL TREATMENT OF INEBRIETY.

THE subject of inebriety has long been under discussion, but until recently it has been treated as a failure in the fulfilment of one "jot" of the moral code, rather than as a disease curable by medical treatment. The temperance enthusiasts have long appealed to the

emotions, often citing cases pathetic enough to bring "a tear from the heart of a stone." Still many homes of the people have remained haunts of vice and poverty caused by this terrible drink curse: the Prisons and Houses of Correction have remained crowded year in and year out by the victims of alcoholism. But happily, by the strenuous efforts of some in our community, who have brought the full light of medical science to bear upon this subject, The Prisoners' Aid Society of Toronto has decided that it would be well worth an endeavor to give the imprisoned inebriates at least one chance to reform, this chance to be founded on reason, *via* correct medical treatment. If our readers will peruse carefully the very interesting article by Dr. A. M. Rosebrugh, in this issue of the JOURNAL, they will gain a comprehensive knowledge of the method of treatment proposed by him and at present under consideration. Certainly it will (if the necessary legislation is passed) cost the Government a good round sum to pour costly remedies down so many thirsty throats; but if even half the percentage of those treated are really cured, it will mean a saving of funds eventually, for drunkards reappear on frequent "farewell tours" to our prisons and a "positively last appearance" would refresh the weary eyes of our Police and County Court judges, and prevent the further necessity of providing lodging, food and filtered water.

W. A. Y.

PHYSICAL TRAINING IN THE PUBLIC SCHOOLS.

To whom does the world owe a living? is a question that has been tersely answered by some one—"To children and idiots." To children it owes more than a mere living, it owes, a training—mental, physical and moral. Until very recently the highest ambition of our scholastic institutions has been to turn out a race of "little kid cute 'uns," their cerebral faculties crammed with non-descript knowledge, their memory "the thing they forget with;" yet the educationalists deemed this unriveted helmet coat of mail enough to wear during all the battles of after life. But, happily, ideas have changed, and to a great extent the "cramming" system has been abandoned, and the physical training of the scholars has now become of almost equal importance with the mental. How many lives have had to write the word *failure* as a *finis* to the book of life, simply because of physical infirmity brought about by over-study? The idea of physical training was well understood by

the Greeks and Romans, who insisted upon the physical side of the child being first developed and the mental nature afterwards. The Inspector of our Public Schools in Toronto has chosen the happy medium of joining forces and developing the mental and physical natures of the pupils slowly and carefully at the same time.

For the fuller and freer development of the pupil, we thoroughly believe in holidays. Ignorant or thoughtless parents have been heard to say they saw little use in so many holidays, the children only got into mischief, and were better in school; forgetting, surely, that on the dial plate of a life's years there has been allotted an hour whose chime tells—"a time to laugh."

The present system of our school management is, therefore, to be congratulated upon its wise generosity in granting the long summer months for holidaying, and giving Dame Nature full charge as schoolmistress; what wonderful lessons she will teach, studies forever a beautiful memory of wood, mountain, and the mysteries of the great ever-restless sea. As the years go by, instead of an army of round-shouldered, spectacled, pert-visaged youngsters, a new race of sturdy young Canadians, strong and sound "in wind and limb," will take their places; standing erect, towering skywards, a living monument to the honor of good physical, mental and moral educational culture—pillars of brass "crowned with lily work."

W. A. Y.

NEWSPAPER PUBLICITY.

The following is a clipping recently taken from one of Toronto's evening papers:

"A FEAT IN SURGERY.

"DELICATE OPERATION PERFORMED SUCCESSFULLY AT TORONTO GENERAL HOSPITAL.

"A delicate and, at the same time, extremely dangerous operation has just been performed at the General Hospital. The patient, Mrs. Ferrier, of Islington, a sister of the Superintendent of the Industrial School, had been ill for a long time, and a short time ago was removed to the hospital, where she was found to be suffering from a dangerous cancer. An operation was decided upon, and on Saturday Dr. Cameron, assisted by Drs. Aikins and Godfrey, removed the cancer by cutting away a considerable portion of the patient's breasts. The cancer was in a position which necessitated delicate handling to escape cutting certain important cords. The operation was very successful and the patient is doing well."

Now, where is this thing going to end? Are we to have a description of our cases, medical and surgical, with perhaps photographs of the patient and attending physician or surgeon, shoved into the daily newspapers on every occasion, to satisfy the idle curiosity and morbid tastes of the public, and thus bring us down to the level of advertising charlatans? We say emphatically, No! Let us put down our foot firmly and at once, and let those whose names have already been soiled in this way take the initiative. Let them sift the matter thoroughly and find out where to attach the blame; interview the editors of the daily press, telling them that the medical profession as a whole denounce such practices, and are above advertising their "wares" in this way. So let us in Canada keep our noble calling clean. If we cannot succeed in it, step down and out; do not drag it with us in the dirt. The profession are nauseated at such methods. Should we find ourselves sinking, release our hold and thereby allow the profession at least to remain on top.

W. H. P.

**THE AMERICAN MEDICAL ASSOCIATION, DENVER
MEETING, JUNE 7th, 1898.**

The following letter has been received from our esteemed *confrère*, Dr. J. M. Beausoleil, of Quebec, who was honored last year by being elected to the Presidency of the Canadian Medical Association, and we take pleasure in publishing it. It fully explains itself, and we feel sure that any member of the Canadian Medical Association, who avails himself of the invitation to attend the American Medical Association meeting at Denver next month, will be more than repaid:

W. A. T.

306 MCPHEE BUILDING,
DENVER, COLO., March 15th, 1898.

*Dr. J. M. Beausoleil, President Canadian Medical Association,
Quebec:*

MY DEAR SIR,—I am requested by the local Committee of Arrangements for the coming meeting of the American Medical Association, which will be held in Denver on June 7th to 10th next, to extend to you and the members of the Canadian Medical Association a cordial invitation to attend this meeting. Great interest is being taken throughout the United States, and this promises to

be one of the most successful meetings of the American Medical Association which has ever been held. Special trains are being arranged from many of the eastern cities to bring the delegates to Denver at that time, and the railways are heartily taking up the matter and promising enthusiastic co-operation to make the occasion an unqualified success. The opportunity will be an unusual one for those desirous of seeing the great health resorts of Colorado and the Rocky Mountains under favorable circumstances and at very much reduced cost.

Delegates from Canada may feel assured that the members of the profession in Denver and Colorado will heartily welcome them to this meeting, and will do all in their power to make their excursion an enjoyable one. Visitors from medical societies outside of the United States are invited to register without fee and to exercise all the privileges of membership, except, of course, that of voting. We hope that the Canadian Medical Association will be represented by a very large delegation.

Will you please see that some notice of this invitation is sent to the members of the Association throughout the Dominion, so that they may feel assured of a hearty welcome if they come and are properly introduced by your Society.

I remain, dear sir, yours very truly,

(Signed) EDMUND J. A. ROGERS (McGill),
Chairman Committee on Foreign Invitations.

MEDICAL ORDERS FOR THE ARMY OF INVASION.

ANTICIPATING the service the army will be called upon to perform in Cuba, Surgeon-General George M. Sternberg, of the American army, has issued from Washington a circular of instruction to medical officers giving directions for obtaining the highest sanitary conditions in camp life. It will be of interest to our readers to know what some of the recommendations are. They include the following:

"That when practicable camps shall be established on high and well-drained ground, not previously occupied.

"Camps should be changed to fresh grounds every ten days or oftener.

"Troops should drink only boiled or filtered water and coffee or tea (hot or cold), except where spring water can be obtained which is pronounced to be wholesome by a medical officer.

"Whenever a case of yellow fever occurs in camp, the troops should be promptly moved to a fresh camping ground located a mile or more from the infected camp. No doubt typhoid fever and probably yellow fever are frequently communicated to soldiers in camp through the agency of flies.

"It is for this reason that a strict sanitary police is so important.

"When called upon for duty at night or early in the morning a cup of hot coffee should be taken.

"In decidedly malarious localities from three to five grains of quinine may be taken in the early morning as a prophylactic, but the taking of quinine as a routine practice should only be recommended under exceptional circumstances."

W. A. Y.

THE AMERICAN RAILWAY SURGEONS' ASSOCIATION.

THE approaching meeting of the American Railway Surgeons' Association, which will be held in Toronto this year, promises to be a magnificent success. The exhibits will be shown in the gymnasium, which is immediately in the rear of the Convention Hall in the Educational Buildings, St. James Square. A great many of the most prominent surgical instrument houses of the United States, as well as our own country, have written for space. The attendance of members will, it is expected, eclipse, in point of numbers at least, the meeting which took place at Galveston some years ago. It is fully expected that nearly every Railroad in North America will be represented at the meeting either by its official surgeon or by proxy. The Local Committee of Arrangements are very busy at present considering plans for the entertainment of the visitors, and it is expected that the Arlington Hotel will be headquarters during the few days of the convention.

W. A. Y.

MEDICAL COUNCIL ELECTIONS.

THE election for representative to the Eleventh Territorial Division (Toronto, west of Yonge) in the Ontario Medical Council took place last month. The contestants were Dr. A. A. Macdonald and Dr. J. Spence. The contest waxed warm and both parties did considerable work in their own behalf. The result showed a majority of six in favor of Dr. Spence, the official returns being:

Dr. A. A. Macdonald.....	85
Dr. J. Spence	91

W. A. Y.

The Physician's Library.

The Surgical Complications and Sequels of Typhoid Fever. By W. W. Keen, M.D., LL.D., Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Philadelphia, Vice-President of the College of Physicians of Philadelphia, etc. Based upon tables of 1,700 cases compiled by the Author and by Thompson S. Westcott, M.D., Instructor of Diseases of Children, University of Pennsylvania. With a chapter on "The Ocular Complications of Typhoid Fever," by George E. de Schweinitz, A.M., M.D., Professor of Ophthalmology, Jefferson Medical College; Professor of Diseases of the Eye, Philadelphia Polyclinic; and as an Appendix, "The Toner Lecture," No. V. Philadelphia: W. B. Saunders. 1898. Toronto: J. A. Carveth & Co.

Of all diseases which the general practitioner need most fear, typhoid fever can take nearly first place. Not till ten days after the temperature has become normal is the patient to be considered safe or out of danger of complication of one kind or another setting in. Dr. Keen's book, after careful perusal, will be of the greatest assistance to the medical attendant in removing worry from such a source during his treatment of typhoid fever at any of its stages or in any of its varied manifestations. The book is most clear and concise, and printed in the usual perfect manner characteristic of the publishers. The origin of the work was the fifth Toner Lecture, delivered by the author in 1876, on "The Surgical Complications and Sequels of the Continued Fevers," and which was a year or so after published by the Smithsonian Institution. Since then Dr. Keen has taken up the subject, from a much more complete standpoint, and gives, with the assistance of Dr. T. S. Westcott, his experience tabulated upon the basis of 1,700 cases. In different chapters, Dr. Keen discusses Typhoid Gangrene, Typhoid Affections of Joints, Typhoid Abscesses, Typhoid Hematomata, Typhoid Parotitis, and many other less common complications of this dire disease. The book is well illustrated, and shows most careful work in every detail. Plate III. of Necrosis of the Cricoid Cartilage is simply perfect, standing out in bold relief. The work is worthy of a place in any medical library.

Pasteur. By Percy Frankland, Ph.D. (Wurzburg); B.Sc. (London), F.R.S.; Associate Royal School of Mines; Fellow of the Institute of Chemistry, Professor of Chemistry in Mason University College, Birmingham, etc., and Mrs. Percy Frankland, authors of "Micro-Organisms in Water," etc. New York: The Macmillan Co.; Toronto: Tyrell & Co. Price, \$1.25.

Some men achieve greatness; Pasteur was one of them. The medical world reveres to-day the very name of this undaunted

master worker. On the occasion of Pasteur's jubilee celebration, Lister, representing the Royal Society, said: "Truly, there does not exist in the entire world any individual to whom the medical sciences owe more than they do to you. Your researches on fermentation have thrown a powerful beam, which has lightened the baleful darkness of surgery and has transformed the treatment of wounds from a matter of uncertain and too often disastrous empiricism into a scientific art of sure beneficence. Thanks to you, surgery has undergone a complete revolution, which has deprived it of its terrors and has extended almost without limit its efficacious power."

It is of this Pasteur, the student of unlimited energy and supreme concentration, that this concisely-worded volume tells, as man and scientist. The book becomes of absorbing interest as the reader is allowed to follow the worker step by step through his mazy chemical researches, which are found to be but the devious paths by which science revealed to the master mind her strange secrets. Nothing can be more inspiring than to read how this student attained success. Born of the people, but blessed with a thorough education and a clear intellect capable of the highest cultivation, his eagerness to achieve and capacity for work were marvellous. Honored by the world at large because of the practical results to humanity of his discoveries, respected in death, as on through the centuries, many will pause to read the simple words, "*Ici repose Pasteur.*"

W. A. Y.

Accident and Injury: Their Relation to Diseases of the Nervous System. By Pearce Bailey, A.M., M.D., Attending Physician in the Department of Correction, and to the Almshouse and Incurable Hospitals; Assistant in Neurology, Columbia University; Consulting Neurologist to St. Luke's Hospital, New York City. New York: D. Appleton & Co. 1898. Toronto: George Morang, Traders' Bank Building.

We are not aware of any other work dealing, as this one written by Dr. Bailey does, with nervous affections resulting from injury. There are many cases which the surgeon has to deal with and in which the question of liability on the part of large corporations forms a most important consideration. It is in such instances that this well-written book will be of marvellous assistance. That such matters are not understood as they should be by medical men is proved every day in the court of law, where sometimes most contradictory medical expert evidence is submitted. The author has certainly conferred a benefit upon his confreres in giving a book wherein facts of personal experience, embodying his views and deductions in connection with so-called traumatic neuroses are given in a clear and concise manner. The first part of the volume is concerned with the simple method of examination, the causes and effects of acute organic injuries to the nervous system, and a consideration of "in how far accidents may be held responsible for

the appearance of, certain chronic degenerative diseases." The question of malingering is also considered, but not much space is given to treatment. The subjects of neurasthenia, hysteria and like affections are gone into in a very clear manner. The work as a whole is one fraught with interest to all medical men, especially to those who are frequently called upon to give so-called "expert" evidence.

Atlas of Methods of Clinical Investigation. With an Epitome of Clinical Diagnosis and of Special Pathology and Treatment of Internal Diseases By Dr. Christfried Jakob, formerly First Assistant in the Medical Clinic at Erlangen. Authorized translation from the German. Edited by Augustus A. Eshner, M.D., Professor of Clinical Medicine in the Philadelphia Polyclinic; Physician to the Philadelphia Hospital. Eighty-two colored illustrations upon sixty-eight plates, and sixty-four illustrations in the text. Philadelphia: W. B. Saunders. 1898. Toronto: J. A. Carveth & Co.

It has always been a well-known fact that the Germans have the ability of turning out most beautifully executed plates for illustration purposes, so that that alone will render the translation of Dr. Jakob's work most valuable to the American reader. True, there are quite a number of works on clinical medicine, but in this one the profession have a book which is exceedingly practical and thoroughly readable. The translation, as done by Dr. Eshner, has been free rather than literal, thus "conveying the spirit rather than the language of the original." There is no doubt that if the reproduction of the book in English receives anything like the reception it did in its mother country, more than usual success awaits it. We admire exceedingly the delicate coloring of the plates in the section on clinical microscopy and chemic color reactions. They are most beautifully executed, more so than those representing diseases of the lungs, which, if anything, are not so fine, and have not had the same attention to detail given them. The book is within the reach of all, and is worth considerably more than the price charged for it.

Medical Annual and Practitioners' Index. A Work of Reference for Medical Practitioners. 1898. Sixteenth year. Bristol: John Wright & Co., Stonebridge. London: Simpkin Marshall, Hamilton Kent & Co. Toronto: J. A. Carveth & Co.

Among the contributors to the 1898 Annual are Herbert W. Allingham, F.R.C.S., Fletcher Beach, M.B., James Cantlie, M.A., F.R.C.S., Harry Fenwick, M.D., F. de Havilland Hull, M.D., Colcott Fox, B.A., F.R.C.P., Priestly Lecch, M.D., G. Lane Mullins, M.A., M.D., Joseph Priestly, M.D., and A. H. Tubby, M.D., M.S., with twenty others just as well known. The publication of "The Medical Annual" each year has come to be quite looked forward to by many practitioners as being an essential part of the yearly

addition to their library. This book is full of the most recent additions to the science of medicine, as well as surgery, every year making it better, more readable, and still more indispensable. The publishers' idea of getting out an index of "The Annual" from the year 1887 up till the present is capital, and will be welcomed by practically every subscriber. A department which will be found exceedingly useful this year is that on "The Bacteria Pathogenic in Man," written by Mr. S. G. Shattuck, of the Royal College of Surgeons. The plates illustrating this department are very finely executed, and will add very materially to the interest evinced. To all medical men who take any interest in medical jurisprudence, the report of the legal decisions which affect the medical profession will be found exceedingly useful and worthy of careful perusal.

The International Medical Annual and Practitioners' Index.

A Work of Reference for Medical Practitioners. 1898. Sixteenth year. New York: E. B. Treat & Co., 241-243 West Twenty-Third Street.

This ever-welcome work is full of good things in all the departments of medicine. We notice with pleasure that the work of our collaborators, Messrs. McKenzie and Galloway, on the treatment of chorea, is referred to.

Probably the most attractive feature in the present volume is the Atlas of the "Bacteria Pathogenic to Man," by S. G. Shattuck, F.R.C.S., of the Royal College of Surgeons Museum. The accompanying illustrations will, when completed in the next issue, form a complete atlas of the pathogenic bacteria. On looking over the list of contributors, one is easily convinced that with such collaborators, each of whom is a specialist of note, any advance in treatment, in medicine, surgery, gynecology, or any branches into which the *ars medendi* is now divided, will be recognized and described. The "Annual" is equally suited for the desk of the specialist or the general practitioner. If, through motives of economy or lack of time, one does not read current medical literature, the perusal of the articles in this volume will put one abreast of the therapeutic achievements of 1897. On the other hand, an industrious reader of the medical journals of last year will find in the monographs of this volume useful and interesting memoranda, which had quite escaped his notice.

J. J. C.

Scribner's Magazine. Published monthly. Clás. Scribner's Sons, New York. Price \$3.00 a year.

Contains the following articles in the May number: Undergraduate Life at Wellesley, by Abbe Carter Goodloe; illustrations by the Misses Cowles, C. Allan Gilbert, E. C. Peixotto and B. J. Rosenmeyer, and from photographs by Partridge. The King's Jackal, in four parts, Part II., by Richard Harding Davis; full-page illustration by Charles Dana Gibson. Georgina, a poem, by Charles Henry Webb. The Story of the Revolution—The Burgoyne

Campaign and Its Results, by Henry Cabot Lodge, senator from Massachusetts; illustrated with drawings by Howard Pyle, E. C. Peixotto, F. C. Yohn, H. C. Christy, and with portraits and documents. The New Reporter, a newspaper story, by Jesse Lynch Williams. Two sonnets, Paganism, Reminiscence, by Francis Charles McDonald. The Workers, the West. III.—In the army of the unemployed, by Walter A. Wyckoff; illustrations drawn from life by W. R. Leigh. The Hunting-Call of Spring, a poem, by Marion Couthouy Smith. Some Bicycle Pictures, drawn by A. B. Frost—snow riding; a bit of bad road; coasting; misery; a terror of the road; a June afternoon. Red Rock, a chronicle of reconstruction, chapters XVII.-XXI., by Thomas Nelson Page; with illustration by B. West Clinedinst. A Bargain, a poem, by Theodosia Pickering. The Point of View—The romantic element in American fiction; sorrow's crown; the plague of inefficiency. The Field of Art—The lesson of the photograph.

Flint's Encyclopedia of Medicine and Surgery. Second (1898) edition, 1555 pages, revised with the assistance of fifty-six contributors, and thoroughly in line with recent advances in medical science. Cloth, \$5.000; leather or half morocco, \$6.00.

As the name implies, this work is a compendium of the practice of medicine, with descriptions of the more common and more important surgical operations, together with articles on gynæcology, diseases of children, and diseases of the eye and ear. It is likely to be useful to a practitioner who wishes to have ready access to a work containing the opinions and practices of leading specialists in any of these different branches of medicine. The articles are pithy and, needless to say, quite modern. Treatment is the most important feature in the work, homœopathic symptomatic indications being given as well as allopathic treatment. This feature ought to make Flint's Encyclopedia useful to homœopaths, eclectics and allopaths.

At page 582, top of the page, second column, in the article on "Gunshot Wounds," the following statement appears: "Apertures of exit are cleaner and *smaller* than even the ball which made it. Entrance is *everted, larger* and *lacerated*." This is evidently a mistake.

The volume is printed on thin paper and not being bulky, is convenient for use in the office.

J. J. C.

The Quarterly Journal of Inebriety. Hartford, Conn.

This quarterly is published under the auspices of the American Association for the Study and Cure of Inebriates. The subscription price is very reasonable, and it is generally to be regretted that it is not in more general use by the temperance agitators who try to make life suitably miserable for plain people in Ontario. The journal is thoroughly sane, and never plays to the gallery.

The cause of the professional abolitionist, as a money-making organization, will probably continue to make money as long as blind bigotry and ignorant fanaticism can be appealed to; but the humanitarian cause of temperance will never, we think, make any solid ground until the subject is approached in the sane and scientific spirit maintained by this excellent journal. We commend it unprovisionally, not only to the general practitioner, but also to the laity.

E. H. S.

The Psychological Correlation of Religious Emotion and Sexual Perversion. By James Weir, jr., M.D., Louisville, Ky. \$2.00.

This work contains, besides the initial essay included in the title, a number of interesting papers on scientific subjects. The opening monograph, to the publication of which the author says he has been incited "by the commendations of three of the most eminent critics and editors of magazines in the United States," deals ostensibly with a subject which can hardly be said to be altogether new to the alienist, and in a manner which certainly has nothing new in it. To even the casual observer, this correlation, if unprejudiced, must be a foregone conclusion. The author has collected a considerable mass of evidence, which will be very useful. The essays on Occultism, Hypnotism and Suicide will be found of interest.

E. H. S.

A Compendium of Insanity. By J. B. Chapin, M.D. Philadelphia: W. B. Saunders.

This little book will certainly find a very large constituency at once among the student class at the universities, where a general outline of the subject in as small a space as possible, and put in the clearest terms, has always been greatly in demand. Indeed, we think that some might be found who are no longer students, whose usefulness would be greatly enhanced professionally by the careful perusal of just some such little manual as the present one. There are a number of plates, though it is extremely doubtful if photographs will ever prove of use in familiarizing the student with any of the clinical details of mental disease.

E. H. S.

The American Journal of Insanity. Baltimore: Johns Hopkins Press.

This great quarterly, which is published under the auspices of the American Medico-Psychological Association, is now entering upon its fifty-fifth year. In its pages for more than half a century will be found a history of the modern enlightenment in the treatment of the insane, a movement of which its original publication was perhaps an indication, and one with which it has always kept pace, or for which, rather, if a term from the world of sport may be used, it has for many years "set the pace." In the sumptuous dress which the Johns Hopkins Press has given it, one cannot but

foretell a brilliant career for this standard publication, which, after many victorious battles, has many battles to fight. E. H. S.

Drill Regulations for the Hospital Corps, United States Army.
Published by the permission of the Surgeon-General, U.S.A.
Cincinnati, O.: The Pettibone Bros. Mfg. Co. 1897.

As the name would indicate, this booklet consists of the drill regulations as enforced by the United States Army. It includes "Detachment," "Alignments," "Marchings," "Turnings," etc. The most interesting part to the medical man is that dealing with the manual of the litter, giving fullest instructions as to the use of this *improvised ambulance*. The pamphlet will prove most useful to medical men connected in any way with the militia.

The Alienist and Neurologist. St. Louis, Mo.

This journal enters upon its nineteenth year with an opening number of about two hundred pages. Like the foregoing, it is a standard publication, and indispensable to the student of nervous and mental diseases. It should be more generally taken than it is by libraries of a more or less scientific nature. Indeed, it is unfortunate that not a greater number of the general profession should interest themselves in this very important branch of research. E. H. S.

Practical Military Instructions and Drill Regulations for National Guards and Military Schools. Compiled from authority by Lieut. W. R. Hamilton, U.S.A. Reno, Nevada: Nevada State Journal Print. 1895.

To anyone desiring quite full information in matters of drill regulations, we can recommend this pamphlet. It is written clearly and concisely.

Pamphlets Received.

"Quarterly Bulletin of the Michigan State Board of Health," Lansing, Mich., April 15th, 1898.

"The Truth About Cigarettes," read and discussed by the Medico-Legal Society of New York. Clark Bell, LL.D., editor.

"Internal Cerebral Meningitis Chronica." Notes on Diagnosis and Treatment. By Elmore S. Pettyjohn, M.D., Alma, Mich.

THE will of Mr. Ernest Hart shows the personal estate of the net value of £12,114. With the exception of a few small legacies to relatives and servants, he bequeathed his estate to his wife.

Items of Interest.

"A BRIEF FOR THE CIGARETTE."

THE paper cigarette, against which so much has been said and written, has an able champion in W. H. Garrison, whose address on the subject before the Medico-Legal Society at its last meeting attracted considerable attention. The current issue of the *Medico-Legal Journal* contains the full text of this paper, entitled "A Brief for the Cigarette," and in it Mr. Garrison has brought a strong array of facts to shatter what he termed the "unreasonable prejudice which at present exists against the paper cigarette," and was certain that the investigations of professional men of science would only emphasize the results at which he had arrived.

The annual output of cigarettes for 1897, he said, was four thousand millions, and if it is the malign and wicked thing which its opponents claim it to be, its manufacture and sale should be suppressed as dangerous to the public health. Apparently all the agitation against the fragrant cigarette was born in prejudice like that other similar fiction, "chloroforming" or "poisoning from canned meat."

Prof. H. W. Wiley, chief chemist of the United States Department of Agriculture at Washington, analyzing that brand of American cigarettes which is used by more than one-half the cigarette smokers of the country, finds that a cigarette is made of 1.0926 grains of tobacco enveloped in a wrapper of paper weighing 0.038 grain. In other words, one pound of tobacco will furnish fillers for 416 cigarettes, and one pound of cigarette paper will serve to envelop 12,000 of these fillers. One twenty-sixth of an ounce of tobacco in a paper one by three inches in size and weighing seven one-hundredths of an ounce is a cigarette. Just tobacco and paper!

What kind of tobacco? Prof. Willis G. Tucker, of the Albany Medical College, and analyst of the State Board of Health, says in his ninth annual report: "Cigarettes are generally made from tobacco of good quality. Sensational statements that they are prepared from the filthiest tobacco and dirtiest refuse are not worthy of credence and can be easily refuted."

Prof. Wiley says that in many samples purchased in the open market he failed to find any trace of arsenic or opium, or any of its active principles. Prof. Tucker prepared for his work of analysis by searching the medical text-books and journals, and couldn't find even a statement that these foreign substances were employed. Dr. F. G. Payne, State Chemist of Georgia; Profs. Robert and

Albert M. Peter, of Lexington, Ky.; Prof. James Dewar, of Cambridge; William Odling, of the University of Oxford, and C. Meymott Tily, of "Forensic Medicine," London Hospital, join with those named in pronouncing the American cigarette free from opium or arsenic.

Then comes the third bugaboo—that of inhalation of the smoke—which called forth an answer from Sir Henry Thompson, who said that the cigarette was the least injurious form of smoking, and Meyer Dutch wrote that "the inhaled smoke rarely passes beyond the bronchi, very little ever entering the air vesicles."

Thus science lays another robust falsehood in the dust. The cigarette smoker may henceforth enjoy his rings of smoke in peace of mind.—CYRUS ALL RICH, in *Scientific American*.

THOSE who desire to see the argument for teaching physiology' and in the teaching of physiology using dissection and even vivisection, in the public schools, will find it effectively presented by Professor B. G. Wilder in a pamphlet reprinted from "Science" for December, 1897. He claims that the knowledge of man's own physical nature is essential to a liberal education; that the foundations for future specialization must be laid in youth, otherwise the time that "specialists might devote to research and advanced instruction is consumed in acquiring and imparting the neurologic alphabet;" that the mere memorizing which is required becomes more irksome and difficult with advancing years; that "children are spontaneously interested in natural objects," and that their supposed objection to "specimens" is either imaginary or due to false education; that "if it be legitimate to slaughter animals for food, it is even more so to kill them humanely, as with chloroform, in order to gain information;" and that some experiments in education have practically proved certain of these theses, such as the readiness of children to acquire the language of physiology and the absence of objection in their minds to dealing with specimens. The paper is interesting, but to us is not convincing. That some general knowledge of hygiene is a necessary factor in all education is, we think, true; children should be taught to know how to use their bodies. But it does not follow that they should be taught anatomy or physiology. The danger to our public school system from overloading it with too many studies is very serious; the danger to the individual pupil of making him an egoist, turning his thoughts upon himself and his own vital processes, from the too early study of physiology, philosophy, or ethics, is very considerable. We cannot provide a foundation for all forms of specialism without the first peril, nor can we teach either physiology, psychology, or ethics scientifically, except to advanced pupils, without the second. Our public school system, at least in the great towns and cities, needs greater simplification rather than greater complexity.—*The Outlook*.

LISTERINE

 The Standard Antiseptic.

- LISTERINE** is a non-toxic, non-irritating and non-escharotic antiseptic, composed of ozoniferous essences, vegetable antiseptics and benzo-boracic acid.
- LISTERINE** is sufficiently powerful to make and maintain surgical cleanliness in the antiseptic and prophylactic treatment and care of all parts of the human body.
- LISTERINE** has ever proven a trustworthy antiseptic dressing for operative or accidental wounds.
- LISTERINE** is invaluable in obstetrics and gynecology as a general cleansing, prophylactic or antiseptic agent, and is an effective remedy in the treatment of catarrhal conditions of every locality.
- LISTERINE** is useful in the treatment of the infectious maladies which are attended by inflammation of accessible surfaces—as diphtheria, scarlet fever and pertussis.
- LISTERINE** is especially applicable to the treatment of scarlet fever, used freely as a mouth wash or by means of the spray apparatus.
- LISTERINE** is extensively prescribed in typhoid fever both for its antiseptic effect and to improve the condition of the stomach for the reception of nourishment.
- LISTERINE** agreeably diluted, is prescribed with very good results, in the treatment of diphtheria, both as a prophylactic and curative—internal antiseptic—agent.
- LISTERINE** is used extensively with good results in the treatment of whooping-cough.
- LISTERINE** diluted with water or glycerine speedily relieves certain fermentative forms of indigestion.
- LISTERINE** is indispensable for the preservation of the teeth, and for maintaining the mucous membrane of the mouth in a healthy condition.
- LISTERINE** employed in a sick-room by means of a spray, or saturated cloths hung about, is actively ozonifying, and imparts an agreeable refreshing odor to the atmosphere.
- LISTERINE** is of accurately determined and uniform antiseptic power and of positive originality.
- LISTERINE** is kept in stock by the leading dealers in drugs everywhere.

Lambert's Lithiated Hydrangea.

Close clinical observation has caused Lambert's Lithiated Hydrangea to be regarded by Physicians generally as a very valuable Renal Alterative and Anti-Lithic Agent.

ALBUMINURIA,
BRIGHT'S DISEASE,
CYSTITIS,
DIABETES,
GOUT,
LITHÆMIA, **HÆMATURIA,**
NEPHRITIS,
RHEUMATISM,
URINARY CALCULUS,
and all forms of
VESICAL IRRITATION.

FOR DESCRIPTIVE LITERATURE, ADDRESS

Lambert Pharmacal Co., ST. LOUIS.

TREATMENT OF DYSPEPSIA IN ANÆMIA AND PHTHISIS.

BY EDMUND M. SMITH, M.D. EDIN.; D.PH. CAMB.;

Milner-Fothergill Gold Medallist in Therapeutics.

IN the treatment of nine out of every ten, if not of all cases of anæmia and phtthisis, I have come to regard it as an essential that we must treat the accompanying dyspepsia which occurs in nearly all such cases. In well-marked anæmia the condition is really one of apepsia—there is not enough vitality, not sufficient stimulus from blood stream and from nervous system for the adequate secretion of the digestive juices. Hence, we often find anæmics complaining, even when the degree of anæmia is by no means extreme, of pain after taking food of all kinds, sometimes limited to epigastric area, sometimes more or less diffused throughout the digestive tract. Eructations, flatulence, pyrosis, languor, drowsiness, vomiting, are also frequently complained of; and soon the appetite become capricious, or almost nil, with a dread of taking food for fear of the miseries it creates. There is failure of the elaborating powers of the secretive glands, and therefore the digestion of the food is exceedingly tardy, with the above-named results. The dyspepsia and want of secretive vitality throughout the digestive tract soon lead also to constipation, which adds still further to the miseries and to the hindrances in the way of recovery.

It is not *enough* to give ferruginous tonics. They require a certain length of time in which to correct the anæmia. And whilst they constitute the first essential in the treatment of anæmia, of course, yet we shall greatly expedite recovery, and increase the comfort of the patient during the interval, by administering a preparation of the digestive ferments. The want of digestive secretion obviously must exist throughout the tract: salivary, gastric, pancreatic and intestinal secretions are all deficient, not only in quantity, but in their digestive capacities, from the same systemic cause. If this condition be neglected, then we have increasing indigestion, which leads to a cycle of indigestion, mal-absorption, mal-assimilation, and mal-nutrition—all formidable hindrances to the recovery from the anæmia, besides entailing much discomfort to the patient. The mal-nutrition becomes a serious matter, moreover, for we have a tendency to unhealthy deposits of adipose tissues; skin, fat, muscle and nerve are ill-nourished; there is tendency to positive fatty degeneration; muscular tissues is greatly diminished; neuralgias make life burdensome. The feeble muscular power, with a weight of adipose tissue to carry perhaps, involved impaired locomotor power, and that, added to the drowsiness and languor, excuses the great disinclination to go out for fresh air and exercise, so we lose essential aids to recovery from the anæmia.

It is equally true, of course, that we have many cases of anæmia which have been produced by dyspepsia. For these the correct treatment is to cure the dyspepsia; in doing so we shall in most cases cure the anæmia. But where the anæmia is primary, we require, in my opinion, to alleviate any accompanying dyspepsia until the hæmatinic remedies have largely produced their desired effect. The ferruginous tonics do not do their work sufficiently rapidly to enable us to wait for their effect upon the secretive and absorptive powers of the digestive organs. So, meanwhile, we require to relieve all the digestive organs of their work as far as possible. For this purpose our

An ideal
ointment

• • **Resinol** • •

A perfect
dressing

(R: *Unguentum Resinol* ℞ i)

Antipruritic

Antiphlogistic

Antiseptic

Emollient

Nutrient, Etc.

MEETS ALL INDICATIONS

FULFILLS ALL EXPECTATIONS

INSTANTLY STOPS THE ITCHING

QUICKLY SUBDUES THE INFLAMMATION

MAINTAINS A CONSTANT ASEPSIS

SOOTHES IRRITATION AND PAIN

AND SUPPLIES THE NEEDED NUTRITION

Unguentum Resinol should be readily obtained at any drug store, as it is carried in stock by wholesale druggists and jobbers in medicines everywhere.

RESINOL CHEMICAL COMPANY

BALTIMORE, M.D., U.S.A.

SAMPLE SENT ON REQUEST

BRAND'S Specialties for Invalids

Essence of Beef the juice of finest selected beef, extracted by a gentle heat, without the addition of water or any other substance. It has been introduced into Medical Practice as a stimulant after loss of blood from any cause, and in severe cases of prostration and debility. Being in a jelly form, it is easily administered, and its stimulating properties are at once apparent, without any ill after-effects. Similar preparations are made from MUTTON, VEAL and CHICKEN.

Meat Juice extracted from the prime raw meat by pressure, and contains in an unaltered state the albuminous and other nutritive properties ready for immediate assimilation.

Invalid Soups, Potted Meats of finest quality.

THE A1 SAUCE.

To be obtained wholesale of LYMAN BROS., TORONTO.

BRAND & CO., Limited, Mayfair, London, England.

When writing advertisers, please mention THE CANADIAN JOURNAL OF MEDICINE AND SURGERY.

correct digestive aid is a mixture of the digestive ferments, ptyalin or diastase, pepsin and pancreatin. Such an one is Lactopeptine, always reliable, being in dry form, pleasant to take, and handy, especially in its new tablet form of dosage; and it has maintained its reputation for many years past. One of my favorite prescriptions for anæmia is: A dose of Lactopeptine immediately after meals, repeated if necessary, for pain or other symptoms of continued indigestion, betwixt meals (but the repetition is rarely required); and Bland's pill in capsules, with or without arsenic or nux vomica, one hour after meals, or one hour after the Lactopeptine. It is a pleasure to see even extreme cases of anæmia speedily revive under this treatment. The dyspepsia soon disappears, the patient becomes more cheerful, goes out more into the fresh air, the appetite revives, and more speedily does she recover from the anæmia. So, it is folly to coax digestive secretions by alkalies given before meals, or to give bismuth, etc., as palliatives; we must compensate for what does not sufficiently exist.

In incipient phthisis we often have a certain degree of atonic dyspepsia, partly due to some degree of anæmia also, in which similar treatment suffices to cause great improvement. In these cases it behoves us to put the patient into the best possible general condition to enable him or her to throw off the dread disease which has commenced. So that if there be any appreciable degree of dyspepsia, due to general atonic condition, we must treat that dyspepsia, we must compensate for the inadequacy of the natural functions, we must not neglect such a loop-hole for the attack of the enemy.

In advancing cases of phthisis we have sometimes a miserable dyspeptic state, either atonic, or catarrhal, often the latter, often a combination of both. The reasons for the atonic dyspepsia are obvious. The catarrhal form is produced in several ways; through the prolonged atonic and anæmic state, whereby undigested food has for long acted as an irritant, through the febrile condition with its resultant enfeeblement, through the ingestion of large quantities of foul, indigestible mucus, pus, lung tissue, etc., which has also served to hinder the digestion and absorption of the food and from tubercle in the digestive tract itself. We may find in some cases that this dyspepsia demands attention for the comfort of the sufferer, and in atonic cases Lactopeptine is again a valuable remedy, whilst in catarrhal dyspepsia it can be given for longer and with more benefit than alkalies, bismuth, etc, taking the cases as a whole. Soda and gentian mixture is also a capital remedy before meals, stimulating the appetite, cleansing the stomach, and stimulating the gastric secretion. But if pain or discomforts of indigestion follow the meal, then a compound like Lactopeptine is the handy and rational remedy, and as it is not a drug, but a physiological compensation for a physiological deficiency, there is no reason why it should not be resorted to over and over again during the longest periods.

SANMETTO THE STANDARD PREPARATION FOR GENITO-URINARY DISEASES.

—For some years I have been a very warm admirer of Sanmetto, and have found its action marked and well-defined in the cases wherein I have used it. In cases of prostatitis, with loss of virile power in elderly men I find its action superb. In chronic specific urethritis, cystitis and all irritable conditions of the urinary tract, I find Sanmetto very efficacious. I do not hesitate to recommend it as a standard preparation in cases where the action of pure santal and saw-palmetto is indicated.

Durand, Mich.

JOS. MARSHALL, M.D.

There is no Substitute for Cod-Liver Oil

BUTLER, in his new *Materia Medica*, makes this very clear. He says:

"Cod-liver oil is more readily absorbed and oxidized than any other fat. It has already been prepared by the liver and, therefore, partly elaborated."

Scott's Emulsion

"The Standard of the World"

contains this "prepared and elaborated" oil, emulsified and combined with glycerine and the hypophosphites.

There is no Substitute for Scott's Emulsion.

It is the only permanent emulsion. It is not unpleasant to the taste. It keeps in any climate. It has been tested for nearly a quarter of a century.

Two sizes, 50c. and \$1.00. In prescribing, please specify unbroken package. Small size put up especially for convenience in cases of children.

**SCOTT & BOWNE,
Toronto**

Consulting Physicians and Surgeons.

General Disease.

Drs. WM. E. QUINE, - - - Chicago
I. N. DANFORTH, - - - Chicago
FRANK BILLINGS, - - - Chicago
E. L. SHURLY, - - - Detroit
G. H. FUERBRINGER, - - Saginaw
J. B. GRISWOLD, - - Grand Rapids

Surgery.

JOHN B. HAMILTON, - - Chicago
D. W. GRAHAM, - - - Chicago
THEO. A. MCGRAW, - - - Detroit
G. K. JOHNSON, - - Grand Rapids

Gynecology.

JAMES H. ETHERIDGE, - Chicago
HENRY T. BYFORD, - - - Chicago
H. W. LONGYEAR, - - - Detroit
EUGENE BOISE, - - Grand Rapids

Nervous Disease.

H. M. LYMAN, - - - Chicago
D. R. BROWER, - - - Chicago
RICHARD DEWEY, - - - Chicago
W. J. HERDMAN, - - Ann Arbor

Eye and Ear.

BOERNE BETTMAN, - - Chicago

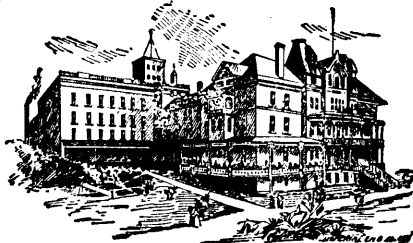
Nose and Throat.

E. FLETCHER INGALS, - Chicago

Pathology.

HENEAGE GIBBS, - - Ann Arbor

ELMORE S. PETTYJOHN, M.D.,
MEDICAL SUPERINTENDENT.



"THE ALMA,"
Alma, Mich.

DOCTOR.—"The Alma" is especially equipped for treating those cases you find difficult to treat at home. "Neurasthenia," Chronic Rheumatism, Stomach, Kidney and Liver Diseases. Convalescent patients find here an excellent opportunity to regain health. Complete rest. Regulated diet. Hydro and Electro-therapeutics. Massage, Swedish movements. *Professional Nurses and Hydro-Theraputists.*

All modern conveniences and luxuries. Send for illustrated book. Special discount to physicians and their families.

OBSERVATIONS UPON THE TREATMENT OF SOME CASES OF NEURASTHENIA.*

BY JEROME K. BAUDUY, M.D., LL.D., ST. LOUIS, MO.

Professor of Nervous and Mental Diseases, and of Medical Jurisprudence, Missouri Medical College.

THAT chalybeates, more especially the *organic* salts of iron, constitute an essential indication in the successful treatment of some cases of neurasthenia, especially in the female, where functional menstrual derangements exist, is to my mind *an indisputable fact*. They produce conditions, oftentimes not attainable by the inorganic preparations for many reasons, which experience and reflection clearly demonstrate.

In a recent clinical study of this affection, my conclusion, as above stated, is fully justified and corroborated by the microscopical blood examinations conducted by my esteemed and skilful friend, Dr. C. Fisch. That cerebro-spinal anæmia is a frequent important concomitant, if not an essential etiological factor of neurasthenia, I *hardly* think admits of cavil.

The clinical histories of appended cases were compiled by my son, Dr. Keating Bauduy, chief of the Neurological Clinic at St. John's Hospital, under whose direct supervision the investigations were conducted. That the ratio, or number of red blood corpuscles, and the percentage of hæmoglobin were deficient in the normal standard of these cases, prior to the treatment, *is incontestable*, as shown by the microscope. That several of the cases to be enumerated showed marked improvement, even after one or two weeks treatment, is moreover revealed in the same manner, and which for rapidity of effect is quite an exceptional, if not a startling therapeutic result, when compared with some of the prior and more established methods of treatment. That many of these cases presented unmistakable evidence of satisfactory improvement, from both a subjective and objective standpoint, was quite as notable as the permanent character of their general amelioration. That the ordinary tonics had in some instances been administered with nugatory results, while pursued along the old lines of authoritative medication, seems quite manifest.

My only explanation of the *surprising results* in the cases herein cited, where the usual officinal class of remedies had formerly been ineffectually essayed, was the superinduction, as is so frequently the case of disturbed digestion and assimilation: results but too familiar and disappointing to professional experience. Aside from the disturbances just mentioned, the development of headache, constipation, etc., frequently obviate their further administration.

When, a few years ago, my attention was called to Gude's preparation of "*Liquor Mangano-Ferri Peptonatus, Gude*," (Pepto-Mangan) so extensively used and highly extolled in Germany, with my usual antipathy for new remedies I reluctantly gave it a trial, anticipating that I would necessarily have to combat the usual disappointing effects of most of the other preparations of iron. The results, however, were *indeed a surprise to myself*, for the concomitant deranging sequelæ were so slight, that but in very few instances in *my extensive* utilization and experience with this special phar-

* Read before the St. Louis Medical Society, February 5th, 1898.

PLEASE SHOW THIS ADV. TO THE LADIES OF YOUR HOUSEHOLD

PLEASE SHOW THIS ADV. TO THE LADIES OF YOUR HOUSEHOLD

FREE! FREE! FREE!

Wishing to introduce the **Patent Felt Mattress** to men and women whose endorsement of it will carry weight with their friends, we make to all householders of the medical and pharmaceutical professions the following offer:

During the month of May we will place on absolutely free trial for thirty nights one of our **Patent Felt Mattresses**, made of interlaced sheets of pure, white, elastic, sanitary Felt; we will make the mattress to order any size desired, in one or two pieces, and prepay the transportation charges. And we undertake that if at the end of thirty days the mattress has not given satisfaction *in every respect*, we shall receive it back and refund the total amount paid on same.

**Better than the Best Hair Mattress at Half its Price
Over One Million Felt Mattresses now in Use in U.S.**

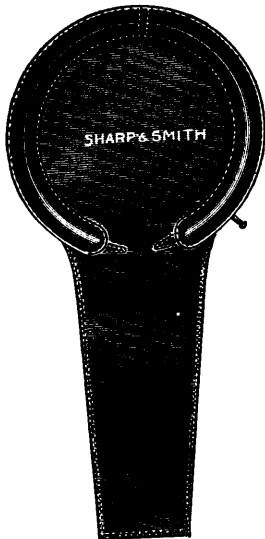
INFORMATION REGARDING THE STANDING AND CHARACTER OF OUR COMPANY CAN BE OBTAINED FROM THE COMMERCIAL AGENCIES OR FROM ANY WHOLESALE DRY GOODS MERCHANT IN CANADA.

FOR A DESCRIPTION OF THE FELT MATTRESS, PRICE LISTS, ETC., KINDLY REFER TO OUR CATALOGUE, FREE FOR THE ASKING.

THE ALASKA FEATHER AND DOWN CO. Limited

290 Guy Street, MONTREAL

When writing please mention this Journal.



REDUCED PRICES ON ❁ ❁ ❁

Operating Cushions

14 inch, square,	- - - -	\$2.50 each.
20 " round,	- - - -	3.00 "
24 " "	- - - -	3.50 "

SUPERIOR SURGICAL INSTRUMENTS
and
HOSPITAL SUPPLIES

Send 33 cents for 1000 page Catalogue.

SHARP & SMITH, 73 Randolph St., CHICAGO, ILL.

maceutical preparation was I obliged to discontinue it. My experience having led me to believe that iron and manganese in combination are both indicated in the vast majority of cases of neurasthenia, this particular remedy *I am now convinced, will prove a great boon both to the patient and the physician.* While it is maintained by some that in the hæmoglobin of the red blood corpuscle manganese is present, as well as iron, I have for many years procured results with a combination of both, not directly obtainable with one alone. We know, however, that manganese gives off oxygen to a greater degree than iron, and it has been argued that for this reason its internal exhibition might correspondingly increase assimilation.

Dr. Fisch's appended microscopical report shows that the increase in the percentage of hæmoglobin, in many of this series of cases, is far in excess of the proportionate increase of the red blood corpuscles. *This fact I deem of greater importance as to the effectiveness of the medicine,* because the count of the blood corpuscles is to a certain extent relative, and the size varies greatly in different cases, and for other reasons the same amount of blood plasma contains different numbers of red cells; hence I would particularly lay stress upon the proportionate increase of the hæmoglobin as the more important factor. The *notable and astonishing improvement* of these cases, when placed upon this preparation, led me to their closer scrutiny, as well as microscopic observation. Before concluding, *I wish particularly* to call attention to the fact of the absence of digestive disturbances and necessary consequent interference in the assimilation. All other unpleasant complicating results were notable by their absence. Of course we do not consider the remedy applicable to cases of lithemic neurasthenia, nor in any manner *specific* in any variety of neurasthenia. In many cases the addition of arsenic and strychnia greatly increase the efficacy of the preparation. I must also take cognizance of the salient fact of the rapidity with which a large number of female neurasthenics, under our treatment, who have suffered with marked functional menstrual derangements have attained a normal condition under the administration of *this most elegant combination of iron and manganese.*

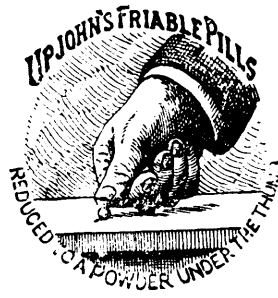
CASE 1—Mrs. S., aged 32 years, mother of three children, came to me in a pitiable mental condition, and had in her arms a nursing hydrocephalic child, five months old. Her mental depression approached a type of veritable melancholia. My first idea was to advise that the child be weaned, and then place her upon the classical opium treatment for melancholia. This was her third child, and, like all mothers, she clung to the life of her unfortunate with characteristic tenderness. Therefore she bluntly insisted upon my candid opinion, as to whether the weaning of the baby might prove fatal. Knowing, as I did, that the life of the child was simply a question of a period of short duration in either case, I so informed her; nevertheless, I insisted that the best hope for her recovery was to wean it. This she refused to do, and after Dr. Fisch had made a blood examination and pronounced her highly anæmic, I reluctantly undertook the case. Aside from her mental depression, physical lassitude and marked pallor, the "casque neurasthenique" symptom was a dominant feature in her case. Any effort to perform her usual household duties produced sensations of cerebral fullness, and persistent pain in the vertex. She even confessed that the idea of suicide had of late frequently haunted her. Under the administration of "Pepto-Mangan," with no other treatment, after the short period of fifty-two days, she was discharged fully restored to her normal condition. Microscopic report showed a relative gain in number of red blood corpuscles of 34 per cent.; hæmoglobin, 44.5 per cent.

Why Under the Hammer?

The significance of the test which consists of driving old mass pills into a board with hammer and block of wood has been questioned by some makers of the "solid kind" of pills.

This test is simply intended to supply the pharmacist and physician with a ready and quick means for estimating the age of factory-made pills and their therapeutic value.

It is effective in showing that there is a difference between **Fresh Mass Pills** and **Old Mass Pills**. The test shows the difference in hardness. Hardness must have some relation to therapeutic value. This is the teaching of pharmacy. The soft pill mass is insisted upon for the pills dispensed extemporaneously by the pharmacist. There can be no exception made in favor of manufacturers whose pills become progressively harder with age. The retail pharmacist cannot be asked with consistency to dispense soft pills extemporaneously and hard pills from the general stock. The stock of ready-made pills should be of the kind that does not deteriorate with age, and that preserves their quality of ready disintegration indefinitely. Upjohn's Friable Pills have these qualities and preserve them indefinitely.



THE UPJOHN PILL & GRANULE CO.

Samples and Price List free on application to

GILMOUR BROS. & CO., Montreal,

Sole Agents for Canada

I. EXAMINATION.

(Beginning of Treatment.)

Date, November 17th, 1897.

Red Corpuscles 3420000
 Hæmoglobin, per cent. 52

II. " Date, December 2nd, 1897.

Red Corpuscles 3400000
 Hæmoglobin, per cent. 54

III. " Date, December 26th, 1897.

Red Corpuscles 4130000
 Hæmoglobin, per cent. 67

IV. " Date, January 8th, 1898.

Red Corpuscles 4245000
 Hæmoglobin, per cent. 75

DURATION OF TREATMENT 52 days

GAIN (Absolute) { Red Corpuscles (in 1000's) 1125

{ Hæmoglobin, per cent. 23

GAIN (Relative) { Red Corpuscles, per cent. 34

{ Hæmoglobin, per cent. 44.5

CASE 2.—Mrs. Sim, aged 23 years, mother of two children, youngest six months and nursing. About the fourth month of her last pregnancy she was troubled with dyspnoea. Gave history of instrumental delivery, followed by puerperal eclampsia. Great loss of blood during birth of child. Two months later, abscesses developed in each breast, and patient was confined to bed during a period of ten weeks. Case presented typical manifestations of neurasthenia, also characteristic apprehensions, with paternatural emotional mobility. Constant cephalalgia in vertical region, persistent parasthesiæ in extremities, mouth and tongue, were also present. She was intensely pale, with every appearance of profound anæmia. Aside from a mild laxative, which was given to obviate constipation—an obstinate feature in her case—nothing was administered save "Pepto-Mangan." After a period of treatment of forty-nine days I discharged her, as she evinced none of the symptoms which formerly existed. A notable feature was the corresponding improvement of the child, notwithstanding the fact that I had previously insisted upon its being weaned, which she had, nevertheless, contrary to my instructions, continued to nurse. Microscopic report showed a relative gain: red blood corpuscles, 19 per cent.; hæmoglobin, 27 per cent.

I. EXAMINATION.

(Beginning of Treatment.)

Date, November 20th, 1897.

Red Corpuscles 3470000
 Hæmoglobin, per cent. 60

II. " Date, December 22nd, 1897.

Red Corpuscles 3980000
 Hæmoglobin, per cent. 69

III. " Date, January 8th, 1898.

Red Corpuscles 4120000
 Hæmoglobin, per cent. 76

DURATION OF TREATMENT 49 days

GAIN (Absolute) { Red Corpuscles (in 1000's) 650

{ Hæmoglobin, per cent. 16

GAIN (Relative) { Red Corpuscles, per cent. 19

{ Hæmoglobin, per cent. 27

—Medical Review.

FOOD FOR THE SICK
 FOOD FOR THE CONVALESCENT
 FOOD TO SUSTAIN MENTAL STRAIN
 FOOD TO SUSTAIN PHYSICAL STRAIN

BOVRIL

is better for all these purposes than any other preparations in existence. It has proved itself.

A BARRIER AGAINST DEATH

from exhaustion in the sick room.

THE EXPRESS TRAIN TO RUGGED HEALTH

for the convalescent, and

THE GREATEST STAYING POWER

to the Athlete, Student, or any person who has to undertake mental or physical strain.

Almost every Druggist sells the preparations of

BOVRIL, LIMITED,

30 Farringdon St.,
 LONDON, ENG.

25 and 27 St. Peter Street,
 MONTREAL, CANADA.

THE Everett House, situated on Union Square, New York, will be found by visiting medicos to be one of the most comfortable and best furnished hostelries in New York city. It is in the very centre of the business part of New York, Union Square, and convenient to Cable and Elevator Roads. The rates are most reasonable, and the table is furnished, with the best that is going.

READERS of this journal by turning to page lix., will find a full announcement of Upjohn's Friable Pills, with illustrated reason why these goods are the most easily digested pills manufactured to-day. There is little doubt that many otherwise valuable formulæ are rendered perfectly inert, and, in fact, irritating to the intestinal track, by being made into the ordinary pill mass and by being allowed to remain for some time before use to become hard and quite insusceptible to the action of the intestinal secretions. Upjohn's pills are the reverse, being so friable as to break under the pressure of the finger. They can be depended upon for rapid action and prompt effects.

AN INCOMPARABLE CLIMATE.—The committee of the French Medical Academy, which a year or two ago reported, after an investigation covering five years of careful study of every portion of the globe, that the valley of the Rio Grande was, as to climate, most admirably adapted for the cure of pulmonary affections, and told what the common experience of thousands and thousands has shown to be the truth. San Antonio, Texas, has been the Mecca to which thousands of sufferers from throat and lung troubles flock, and that great region lying from San Antonio west to the Pacific coast is destined to draw to it that great multitude who seek restored health and prolonged life from the sources from which nature destined they should draw it. In Arizona and New Mexico the health-seekers find near the south borders a climate of unusual dryness and a temperature which varies but little throughout the year. The Southern Pacific System is the only one which directly reaches this section, and the tourist via New Orleans is taken there speedily, and with every convenience to make the journey a pleasant one.

As indisputable proof of the nutritive qualities of Hubbard's Rusks as infants' food, we have simply to quote the following high authorities:

The *Lancet* says: On examination these Rusks proved to contain both carbohydrates and nitrogenous constituents in an easily assimilable form. This is due partly to the selection of superior materials, and partly to care devoted to the cooking process. The Rusks are almost entirely dissolved during the process of mastication, a fact which affords distinct evidence of their easily digestible property. The Rusks are of uniform texture and desirably crisp, and not excessively sweet to the taste. They are free, according to microscopic examination, from irritating particles.

The *Sanitary Record* says of Hubbard's Rusks: In no case have we sampled a finer or more carefully manufactured article: nor can we imagine a more tempting morceau for a jaded appetite than these crisp, light and attractive dainties.

J. Jackson, Esq., M.D., M.R.C.P., Grove Park, Chiswick W., says: I have used and advised the use of your Rusks in several cases to my entire satisfaction and to the satisfaction of my patients. They are an excellent article of food for dyspeptics, as well as for babies and young children.

An eminent Edinburgh dietist says: For years I have recommended the use of Hubbard's Rusks in cases requiring light, nourishing and tasty diet. For children and persons of delicate digestions there is nothing better.

These goods can be procured from any good grocer in Canada.

FOR MAKING LITHIA WATER OF A KNOWN STRENGTH
WHAT CAN BE MORE SATISFACTORY THAN

Wyeth's Compressed Effervescing Lithia Tablets.

WYETH'S LITHIA TABLETS

are most convenient for the preparation of artificial Lithia Water, and the great advantage these tablets have over the natural Lithia Water is that the dose can be regulated very readily to suit the case by dissolving one or more in any desired quantity of water.

WYETH'S LITHIA TABLETS

when taken in doses of from one to two tablets, dissolved in water, and repeated two or three times daily, exerts a marked influence in cases where patients are voiding uric acid gravel, causing the formation of deposits to become less or cease altogether.

WYETH'S LITHIA TABLETS

have been so perfected that they dissolve almost instantly in water, and a tumblerful of Lithia Water *of a known strength* can be quickly, easily and economically made by dropping one or more of these tablets into a glass of moderately cold water, producing a pleasant and palatable draught.

Price, per dozen bottles, 5 grains, 50 tablets in each, \$5.00
" " " 3 " 40 " " 4.00

Wyeth's Effervescing Anti-Rheumatic Tablets

OF SALICYLATES, POTASSIUM AND LITHIUM

(Each Tablet represents 3½ grains of Combined Salts.)

These Tablets of Salicylates of Potassium and Lithium, in the above proportions, are readily soluble, effervesce quickly and freely, producing a pleasant, sparkling draught, and we believe, where salicylate salts are specially indicated, will have the cordial endorsement of physicians.

This combination is recognized as almost a specific in the treatment of **Acute and Chronic Rheumatism, Rheumatic Gout** and kindred ailments, and is an invaluable remedy in all febrile affections inducing headache, pain in the limbs, muscles and tissues; it is also prescribed in **Lumbago, Pleurisy, Pericarditis**, and all muscular inflammatory conditions.

Price per dozen bottles, - - - \$4.00
(Each bottle contains 50 Tablets.)

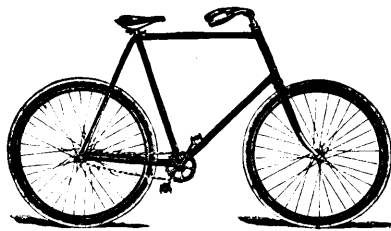
DAVIS & LAWRENCE CO., LIMITED, SOLE AGENTS FOR **MONTREAL**
CANADA

FOR invalid wines of every brand, medical men will find the emporium of Josh C. Moor, at 433 Yonge Street, Toronto, to be the most complete in stock in Canada. Mr. Moor makes a specialty of wines suited to invalid use, and invites doctors to order his goods for their patients. All the best brandies, whiskies, port and sherries will be got here. Malaga and Marsala wines, Johnston & Son's celebrated clarets and sauternes, Chablis' Burgundies and Sir R. Burnetts' world-renowned orange bitters, are always in stock.

ALMA Sanitarium is to-day in the front rank of similar institutions in the United States. It is one of the largest, if not the largest, Sanitarium in America, being situated at a town by name of Alma, in the State of Michigan. It has enjoyed, under the supervision of Dr. Pettyjohn, who is assisted by a large staff of brother medicos, a well-earned and thoroughly-deserved reign of success, and each year is gaining ground, till to-day it is necessary to engage rooms ahead to ensure accommodation. There is no institution anywhere which is furnished with so complete a system for the administration of every form of treatment known to medical men. A full announcement, with cut of main building, will be found on page lv. of this number of the journal.

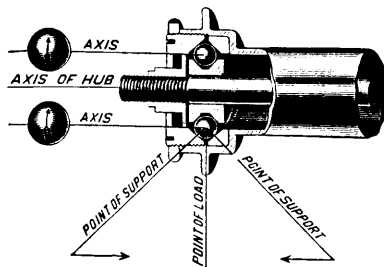
LAUDER BRUNTON'S SIGNIFICANT REMARK ABOUT ERGOT.—The following passage occurs in "Lectures on the Action of Medicine," by T. Lauder Brunton, 1897: "As a rule one does not give ergot until just towards the end of labor, in order to cause firm contraction of the uterus after the labor is over, so that there shall be no bleeding into the uterine cavity. It is generally given now in the form of the hypodermatic injection, and instead of injecting it under the skin, it is usually injected deep into the substance of the gluteal muscle, because when used in this way it does not tend to give rise to abscesses nearly so much as when injected under the skin." If the obstetric practitioner desires to guard against the formation of those abscesses which, in the past, have detracted so greatly from the usefulness of ergot, and which are sometimes followed by gangrenous sloughing, he can do nothing more judicious than accept a positive and emphatic assurance that "Parke, Davis & Company's Ergot Aseptic, for Hypodermatic Use," will exert the important physiological properties of the drug without producing its deleterious after-effects. Prof. W. P. Manton, who occupies the chair of Clinical Gynecology in the Detroit College of Medicine, has subjected Parke, Davis & Company's Ergot Aseptic to searching clinical experiment. The following expresses his opinion of it—an opinion shared by a score of other gynecologists who have thoroughly tested the new product: "To facilitate uterine contraction in every instance, it is a good routine practice to administer a drachm of fluid extract or normal liquid ergot immediately following the delivery of the placenta. If the parturient is completely anæsthetized, as after operative procedures, or where the immediate action of the drug is urgently demanded, hypodermatic injection should be resorted to. Formerly the Bonjean preparation was much employed for this purpose, but within the past two years a much better and more reliable article has been introduced. The Ergot Aseptic (Parke, Davis & Company) comes put up in small bulbs, each containing the proper dose for a single administration, so that all the physician has to do is to break of the neck of the receptacle and draw its contents into the syringe. I have given this preparation a most careful and thorough testing, and find that it is satisfactory in every respect. One great advantage is that it is absolutely aseptic, never of itself giving rise to irritation or abscess formation in the tissues; and it is very rapid and powerful in its effects, producing strong uterine contractions within a surprisingly short time."

Quality



Value

\$85.00



CALL AND SEE THE BEARINGS
AGENTS EVERYWHERE

The E. & D. Bicycle

is not a cheap wheel in any sense of the word. It costs a little more to buy, but the first cost is the end of expenditure. Its quality is high and value the same, while the price for these two wheel virtues is low—very low.

If you will for a moment consider that the 4-point bearings (used only in E. & D. Bicycles) do keep out dust and do keep oil in, and that every ball rolls in an absolutely true pathway, doing away with friction and insuring long life and easy work, you will decide that the price asked is not only not exorbitant, but exceedingly reasonable.



The Canadian Typograph Company, Limited
WINDSOR, ONT.

WE take pleasure in drawing the attention of our readers to the page announcement of the Hotel Traymore, Atlantic City, N.J., appearing in this issue. Of all invalids' resorts on the Atlantic coast, none has been found to have so recuperating an effect as that of Atlantic City, N.J. The Hotel Traymore can be safely recommended by all medical men as being one of the most luxurious hostelryes of New Jersey. It is first-class in every detail, and physicians will find that their patients will receive only the best of care and attention.

AMONG the pharmaceutical preparations manufactured by the T. A. Slocum Chemical Co. (Limited), of Toronto, is one which is every day gaining in favor. The article referred to is Psychine. Dr. A. R. Pyne, the Dominion Analyst, says as follows regarding it: "After making a careful examination of the compound called 'Psychine,' and having tested its action on several cases that came under my observation, I believe it to be a most valuable tonic, and when judiciously taken should prove beneficial in creating a healthful appetite for food, tending to build up nerve tissue, etc., during convalescence from wasting diseases. It is pleasing to know that it contains no metallic compound." The attention of readers is called to page xxxv. of this issue, where they will get full details as to the action of the therapeutical agent.

THE MANY GOOD POINTS OF THE E. & D. BICYCLE.—The bearings on this bicycle were invented in Canada in 1895 by Canadians, and the wheel is built only in Canada and exported throughout the world. It is the first and only Canadian bicycle that has successfully entered the United States market, and Canadians have a particular reason for feeling proud when it is known that this wheel commands a higher price than any wheel in the United States, and that it is sold there at an advance of from \$15 to \$20 above its price in Canada. The 1898 models are the acme of perfection and beauty. Perfection of movement, of course, has always been the particular theme of this company, and they have every reason to feel proud of the reputation they have gained in so short a time by the use of this wonderful hub. We are informed that they have never yet supplied a cone or ball for this bearing, nor even been asked to replace one. They defy their competitors or others to show a cone out of their wheel, no matter how long it has been in use, that shows the slightest indication of wear. They also challenge the public to destroy one of their bearings or to make it bind, no matter how tight it may be screwed up. The wheel is guaranteed to run the year without being oiled or cleaned, no matter how many miles it is ridden, or how much dirt is encountered. The bearings also are guaranteed against wear for three years. They never require to be adjusted or interfered with. The Typograph Company are bringing out a special model this year, which includes an automatic brake that acts on the rear hub. Simple back pedalling applies the brake, and when once applied the foot can be removed and the brake remains, while forward pedalling immediately releases the brake, so the rider completely controls his wheel, whether his foot is on the pedal or not. This model also includes the most perfect gear case made. It is composed of aluminum and celluloid, and does not make the wheel look heavy or cumbersome. It can easily be removed, and leaves the chain and sprockets at all times exposed to view. It is also so arranged that the back wheel can be adjusted without in any way disturbing the case. The points of interest in their 1898 models are entirely too numerous to be noticed here, but we advise all intending purchasers to at least call and see the "E. & D." wheel before they decide on their 1898 mounts.—*Globe*.

The Best Cannot be too Good



Is made from the best Canadian Barley Malt.
 Is richer in Diastase and Maltose than any other made.
 Is guaranteed free from foreign matter, such as Glucose,
 Licorice, Salicylic Acid, etc.

Write for samples and literature to

W. LLOYD WOOD

GENERAL AGENT TORONTO, ONT.

Reduced in Price to \$1.00 per ounce.

EMINENT BRITISH OPINION

AS TO MERITS OF

ANTITOXINE

(Strengthens the Heart's Action.)

THE Late President of the Glasgow Obstetrical and Gynaecological Society of Glasgow has informed us that in his opinion the four Antipyretics which are best known to British Medical men should be placed thus in order of merit.

1. **ANTITOXINE**
2. **Phenacetine.**
3. **Antipyrin.**
4. **Antikamnia.**

The Manager, The British Antitoxine Manufacturing Co.

Glasgow, W., 5th September, 1896.

DEAR SIR: I have found Antitoxine give immediate relief in severe Facial Neuralgia after Phenacetine had failed. After having given Antitoxine a thorough trial—I have used 10 ounces during the last 9 months—I rarely prescribe Antipyrin now and almost as rarely Phenacetine. I believe that the 4 Antipyretics which are at present best known to English Medical men should be placed thus in order of merit so far as they relieve pain, headache, Facial Neuralgia, Dysmenorrhoea, and reduce fever—

- 1.—ANTITOXINE.
- 2.—Phenacetine.
- 3.—Antipyrin.
- 4.—Antikamnia.

I have frequently given Antitoxine in cases where I would not dare give Antipyrin: weak hearts, etc. I have never seen the slightest bad result from its administration. I have used it recently with great success in cases of flushing at the Menopause, one tablet 2 or 3 times a day. I am, dear Sir, Yours faithfully,

M. D.

Some time President Glasgow Obstetrical and Gynaecological Society.

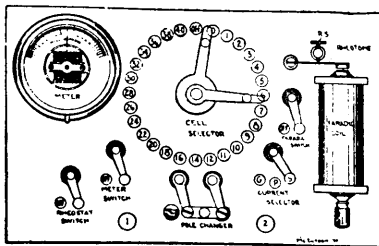
*The original signed letter, of which the above is a copy, will be sent for perusal to any physician who desires to see the signature, provided he promises to immediately return it.

IMPORTANT TO PHYSICIANS.

Since the production of Antitoxine, the only heart-strengthening antipyretic and antineuralgic, unscrupulous imitators have copied our literature, often verbatim, as well as the sphygmographic tracings which we published to illustrate the unique heart-strengthening effects of Antitoxine.

The B. A. M. Co.

Electricity



IN THE TREATMENT OF

**DYSMENORRHOEA, STRICTURES, STENOSIS,
 Removal of WARTS, MOLES, NÆVI,
 CATAPHORESIS, ELECTRO-DIAGNOSIS,
 METALLIC ELECTROLYSIS**

and many other electrical operations, are explained in detail in our 18th edition catalogue.

This work of 300 pages also gives prices and descriptions of the **BEST BATTERIES IN THE WORLD.**

It will be mailed to your address *postpaid*, without charge, if you write and ask for it.

McIntosh Battery and Optical Co.

521-531 WABASH AVE., CHICAGO.

SANMETTO AN INVALUABLE ADDITION TO OUR MATERIA MEDICA.—It gives me pleasure to state that Sanmetto at my hands has proven all that its manufacturers claim for it. I consider it an invaluable addition to our meteteria medica.

SCHUYLER C. GRAVES, M.D.,

Dean, and Professor of the Principles of Surgery and Clinical Surgery, and Clinical Professor of Abdominal Surgery, in the Grand Rapids Medical College.

Grand Rapids, Mich.

ONE of the secrets of enjoyable wheeling is to have not only a properly adjusted, but a resilient tire. Half of the pleasure can be spoiled by not attending to this small but important detail. The Toronto Tire Company, whose headquarters are at 9 Adelaide Street West, are agents for both the Hartford and Vim tires, either of which can be absolutely depended on. They are made of the purest material only and by the best workmen. These points are worth bearing in mind.

LITHOS.—No other preparation recently brought to the attention of the medical profession has elicited so much favorable criticism as *Tablet Lithos Effervescent* (Mulford's). This is a most efficient combination of lithium bitartrate with sodium salicylate, *recens*, and is employed with success in all rheumatic and gouty conditions, and in all affections characterized by an excess of uric acid. Each tablet contains more fresh lithia than found in one gallon of the so-called lithia waters. Being effervescent, the most delicate stomach is not disturbed by treatment with Lithos.

A RELIABLE FOOD.—Imperial Granum has won the confidence of physicians because many years of clinical experience have proved it to be a form of nourishment that is acceptable to the palate and to the most delicate digestion at all periods of life. It is successful not only as an aliment for children, but its rare nutritive excellence in inanition due to mal-assimilation, chronic, gastric and enteric diseases, has been incontestably proven; often in instances of consultation over patients whose digestive organs were reduced to such a low and sensitive condition that the Imperial Granum was the only nourishment the stomach would tolerate, when life seemed depending on its retention.

THE attention of the Canadian profession is directed to the advertisement of the National Blank Company, of New York city, on page xi. of this issue of the journal. This company are manufacturers of some of the most unique and useful articles, especially for medical men. Their Thermo-pen is indeed a novelty, and in our opinion is one of the most useful combinations we have ever seen. It is a first-class gold-nibbed pocket pen, with screwed in at the other end a clinical thermometer of the most approved pattern. The "fountain pen" syringe is even still more unique. It is the same size and shape as a pocket fountain pen, but is in reality a pocket gonorrhœal syringe, so that no one but the bearer of it has any idea of its nature.

THE firm of F. Alfred Reichardt & Co., of New York, stand amongst the first surgical instrument houses of that State. They occupy the main floor in one of the largest buildings on Barclay Street, and are from year to year doing a rapidly increasing trade. Their stock consists of everything requisite to the surgeon's armamentarium, from a carved needle to the most elaborate X-Ray apparatus. As will be seen from their page advertisement in this issue, they are the original manufacturers of Dr. Fred. C. Valentine's apparatus for intravesical irrigation for the cure of gonorrhœa. Any medical man wanting to secure anything in the surgical instrument line will consult their own interests by writing this reliable house, where the prices are right.

E. MERCK

16 JEWRY STREET

LONDON, E.C.



MERCK & CO.

UNIVERSITY PLACE

NEW YORK

Merck's

Chemicals for medicinal use are recognized as the standard for Purity, Reliability and General Excellence.

When ordering, please specify—**MERCK'S**

COCAINE HYDROCHLORATE.

LACTIC ACID.

SALICYLIC ACID AND SALTS.

STRYCHNIN.

IODOFORM.

SANTONIN.

Please direct attention to **MERCK'S**

Peronin

WHICH ACCEPTABLY REPLACES MORPHINE AND CODEINE.

Peronin is a light, white powder, having the formula $C_{24}H_{25}NO_3, HCL$. It is readily soluble in water, and is less bitter than morphine. It exhibits the unpleasant by-effects of morphine in a far less degree. Its use is particularly recommended in the troublesome coughs of phthisis and bronchitis, in asthmatic affections, and against rheumatic and neuralgic pains.

Peronin may be given in the form of pills, compressed tablets, or dissolved in syrup or sweetened water. For convenience of dosage, tablets, each containing $\frac{1}{3}$ grain, at 75c. per 100 tablets, are on the market.

TO BE HAD OF ALL DRUGGISTS AND CHEMISTS, OR DIRECT OF

E. MERCK, Chemical Works, Darmstadt

MERCK'S ANNUAL REPORT ON APPLICATION

THE name of Pasteur is a guarantee which is undoubted. The Pasteur Institute in Paris, which has become world-renowned, turns out Anti-diphtheritic serum, the preventive power of which is 50,000 units. Anti-diphtheritic serum contains no antiseptic, and can therefore be injected in large quantities without inconvenience. Owing to this good point also, it is quite unnecessary to concentrate it. As a rule with this serum, the false membranes become detached within twenty-four to thirty-six hours after the first injection. This serum, in a word, can be depended upon every time to cure diphtheria, provided, of course, the disease has not advanced too far. The attention of the readers of this journal is directed to page xiii. of this issue for full particulars.

THE PROPER TREATMENT OF HEADACHES.—J. Stewart Norwell, M.B., C.M., B.Sc., House Surgeon in Royal Infirmary, Edinburgh, Scotland, in an original article written especially for *Medical Reprints*, London, Eng., reports a number of cases of headache successfully treated, and terminates his article in the following language: "One could multiply similar cases, but these will suffice to illustrate the effects of antikamnia in the treatment of various headaches, and to warrant the followings conclusions I have reached with regard to its use, viz.: (a) It is a specific for almost every kind of headache. (b) It acts with wonderful rapidity. (c) The dosage is small. (d) The dangerous after-effects so commonly attendant on the use of many other analgesics are entirely absent. (e) It can therefore be safely put into the hands of patients for use without personal supervision. (f) It can be very easily taken, being practically tasteless."

It is admitted by all that a very large proportion of the bicycle saddles in use to-day are most deleterious to the health of the rider, owing to the fact that they are not anatomically correct. Physicians come across cases every day where great-suffering and subsequent illness is induced by the use of a saddle which causes pressure upon important internal structures of the body. Saddles which are built to sell without any consideration for bodily comfort are the ones which must get only condemnation from the medical profession; but those which are built on correct anatomical principles will meet with both the approval and endorsement of doctors as a class. One of the latter kind are those manufactured by The Hunt Manufacturing Co., of Westboro', Mass., U.S. The attention of the readers of this journal is called to page lxxiii. of this issue, where they will see the announcement of this firm. Physicians will find that they will receive the thanks of those of their patients to whom they recommend any of the Hunt goods, as they will be found hygienic and correct in principle. These goods can be secured from Mr. Rockwell, Room 19, Yonge Street Arcade, Toronto.

A PLAN is being recommended by French physicians to cure colds by applying ice to the spine. Indeed, nowadays the curative value of cold is being highly spoken of, and the inflammatory sore throat which used to be treated by poultices and warmth is now said to be easily and quickly cured by sucking ice and keeping the patient in a low temperature.—*Ex.*

AFTER careful examination of a lung freshly removed from a man killed in Sing Sing prison, Dr. Thomas H. Manley concludes that death from the electric shock is vastly more agonizing than by either the rope or the guillotine. The fact is, he says, we have no proof that any power can instantly destroy *all* the processes of life, and hence common decency should require delay of autopsy for at least twenty-four hours after execution.—*Ex.*



(Trade Mark)

BAYER'S PHARMACEUTICAL PRODUCTS

SOMATOSE A tasteless, odourless, nutrient meat powder; it contains all the albuminoid principles of the meat in an easily soluble form. It has been extensively employed and found to be of the greatest service in consumption, diseases of the stomach and intestinal tract, chlorosis and rickets. It is of great value in convalescence from all diseases. SOMATOSE strengthens the muscles and stimulates the appetite in a remarkable manner. Dose for adults: a level teaspoonful three to four times a day with milk, gruel, coffee, etc.

IRON SOMATOSE (Ferro-Somatose). A first-class tonic, containing the albuminous substances of the meat (albumoses) organically combined with iron. Special indications: Chlorosis and Anaemia. Daily dose: 75 to 150 grains.

MILK-SOMATOSE (Lacto-Somatose). A strength giving food containing the albuminous matter (albumoses) of the milk.

TRIONAL A most reliable and quickly-acting hypnotic of the Sulfonal group. Dose: 16 to 20 grains, in a large cup of hot liquid.

IODOTHYRINE The active principle of the thyroid gland. It is most efficacious in Strumous Diseases, Myxoedema, Obesity, Rickets, Psoriasis, Eczema, and Uterine Haemorrhages. Dose: 5 grains two to eight times a day for adults; 5 grains one to three times daily for children.

LYCETOL Tartrate of Piperazine Anti-Arthritic, Uric

PHENACETINE-BAYER
PIPERAZINE-BAYER

Solvent. Has a marked effect on the diuresis. Dose: 16 to 32 grains daily.

ARISTOL An Iodine Cicatrisant which is an excellent odourless substitute for Iodoform and highly recommended for Burns, Wounds, Scrofulous Ulcerations, etc.

EUROPHEN A perfect substitute for Iodoform. Odourless and non-toxic. Has a covering power five times greater than Iodoform. Especially useful in Ulcus molle et durum.

LOSOPHAN A cresoltriiodide particularly efficacious in the treatment of all kinds of cutaneous disorders caused by animal parasites.

PROTARGOL A new silver preparation. Most reliable in cases of Gonorrhoea. Antiseptic wound healer. Excellent results in cases of Gonorrhoeal Ophthalmia. Solutions of 1/4 to 2%. Ointments.

TANNIGEN An almost tasteless intestinal astringent. Most efficacious in Chronic, Acute and Summer Diarrhoeas. Adult dose: 8 grains every three hours.

TANNOPINE (Formerly "Tannone"). A new intestinal astringent. Special indications: Tuberculous and non-tuberculous Enteritis, Typhus. Dose: 15 grains, three or four times daily.

SALOPHEN Specific for Influenza, Headache, Migraine, Acute Articular Rheumatism, Chorea, Sciatica. Dose: 15 grains four to six times daily. In powders, etc.

SULFONAL-BAYER
SALOL-BAYER

Samples and literature may be had on application to the

DOMINION DYEWOOD & CHEMICAL CO., TORONTO.

Sole Agency and Depot in Canada for all "BAYER'S" Pharmaceutical Products.

(WHOLESALE ONLY)

Anti-Tubercle Serum
 (PAQUIN)
 Anti-Diphtheritic Serum
 (PAQUIN)
 Anti-Tetanic Serum
 (PAQUIN)
 Anti-Streptococcus Serum
 (PAQUIN)

INDICATED

Tuberculosis
Diphtheria
Tetanus (Lock-Jaw)

Puerperal Fever, Septicemia,
 Mixed Infections of Tuberculosis
 and Diphtheria, Erysipelas, Scar-
 latina, Pyemia, Bronchitis, Bone
 and Joint Tuberculosis.

Tuberculin, Erysipelas Toxin, Mallein, Vaccine Points. Cultures Pathogenic and Non-Pathogenic, Slides of Germs, Outfit for Microscopical Diagnosis of Tuberculosis, Chemio, Bacteriologic and Microscopic Analyses Made.

Brochure, with Clinical Reports, also Vials for Mailing Specimens for Analysis sent on application.

THE PAUL PAQUIN LABORATORIES, 209 N. 7th St., St. Louis, Mo.

CANADIAN AGENTS

HENRY J. DART & CO. - Wholesale Druggists - MONTREAL

Climate
Cure

FOR . . .

Weak Lungs
Weak Throats
Weak Bodies

I know where it may be found

Would you like to know, too?
Just a hint of it here—

THE . . .

Health Resorts
OF New Mexico

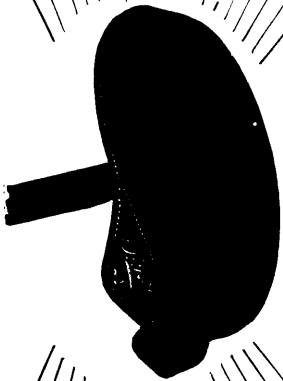
—particularly
LAS VEGAS HOT SPRINGS

Write to me . . .

F. T. HENDRY, 63 Griswold St.,
DETROIT, MICH.

EXAMINE THE FINE LINES OF ALL

Hunt



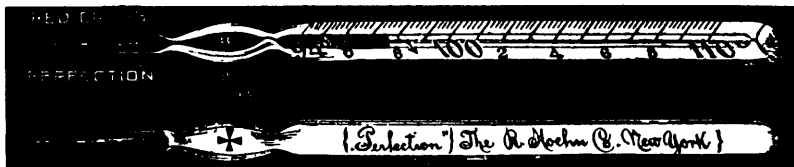
SADDLES

THEY ARE HIGHLY ARTISTIC, GRACEFUL AND SCIENTIFICALLY CORRECT


MR. JOHN ROCKWELL,
19 Yonge St. Arcade, Toronto, Ont.

HUNT MFG. CO., WESTBORO, MASS.

**THE R. HOEHN CO.'S
RED CROSS "PERFECTION" CLINICAL THERMOMETER**



After long experimenting we have succeeded in producing lens front tubing which will magnify fully as well as that of which the Hicks' Clinical Thermometers are made. We are the only American manufacturers who have accomplished this. Our best workmen have used their utmost care to manufacture this tubing into the most perfect Clinical Thermometers which can be produced, and these we are offering under the name "Perfection."

In order to insure the public against imitation, this name "Perfection," as also  (our REGISTERED TRADE-MARK), is etched on every thermometer whether bearing our name or that of our dealers. This cross is always **etched in RED** on the genuine. This is the only American-made Clinical which can take the place of Hicks' in every respect.

These thermometers are all *Quick Reading*, i.e., every two degrees are numbered on the tube, as shown in the above cut.

They are pointed and divided with the utmost accuracy. Moreover, the tubes of which they are made are thoroughly seasoned, and we guarantee that their reading will not rise.

We will exchange **FREE OF CHARGE** any PERFECTION Clinical Thermometer which has not given satisfaction within **ONE YEAR**.

THE R. HOEHN CO., Mfrs., 80 and 82 Chambers St., New York

For sale by all Surgical Instrument Dealers and Druggists.

Photo Engraving
Elliott
Illustrating Co.
31 King St. East, Toronto

NOITOL 
The Most Successful Remedy for **ECZEMA**

As also for SKIN DISEASES generally. Is NOT A SALVE, OINTMENT, SOAP, TAR, or other disagreeable preparation, but a limpid, inoffensive, odorless solution, as its NAME SPELLED BACKWARDS indicates. Samples gratis.

WHEELER CHEMICAL WORKS
151 Lake Street, Chicago, Ill.

The Doctor's Advice
is all the more valuable when he recommends the use of the purest and best articles obtainable. Sea Salt bathing is very often recommended, and the best results can only be had by using the purest salt.

Surf Sea Salt

analyzes 99 98/100 per cent. of pure salt, the crystals are as clear as glass, easily dissolved and much more convenient to use than any other brand. All druggists sell it. 5lb. package 10c., 60lb. box \$1.50.
TORONTO SALT WORKS
Importers, - 128 Adelaide Street East, - Toronto

SPOONER'S
Phenyle Germicide
Disinfectant Powder

TOOK TWO GOLD MEDALS
AT THE WORLD'S FAIR, CHICAGO.


ALONZO W. SPOONER, MAKER
PORT HOPE, ONT.

THE ❁ ❁ ❁
**MISSOURI PACIFIC
 RAILWAY COMPANY**



... AND ...

“Chutmuck Special”

**AMERICAN MEDICAL ASSOCIATION, DENVER, COL.,
 JUNE, 1898.**

DEAR SIR :

For the meeting of the American Medical Association, to be held at Denver, Col., in June, 1898, we take pleasure in announcing that the Missouri Pacific Railway has arranged to run a special through train from St. Louis to Denver, to be known as the “Chutmuck Special,” making the trip *via* Kansas City, Pueblo and Colorado Springs.

This will be one of the handsomest trains ever run in the West, consisting of Compartment Sleeping Cars, Dining Car, Buffet Car, etc., affording special accommodations for the wives and families of yourself and friends. Please remember this in making your arrangements.

Due announcement as to dates, schedule, etc., will be made later on.

H. C. TOWNSEND,

General Passenger Ticket Agent.

B. H. PAYNE,

Ass't Gen'l Passenger Ticket Agent.

For information write to—

**H. D. ARMSTRONG, Trav. Pass. Agent, Missouri Pacific Railway,
 7 W. Fort Street, Detroit, Mich.**

A Magnificent Opportunity for Investment by Medical Men.

The Northwestern Trust and Development Company of America.

*Incorporated under the Laws of
the State of Illinois.*

*Capital Stock, \$500,000 in Fifty Thousand Shares of Ten
Dollars each. Limited Liability and Non-Assessable.*

EXECUTIVE OFFICERS AND DIRECTORS.

OFFICERS: GEO. A. BAYNES, Financial Agent, President; R. M. ROGERS, of Shope, Mathis, Barrett & Rogers, Vice-President; F. C. N. ROBERTSON, Auditor Pullman's Palace Car Co., Treasurer; WALTER R. NURSEY, Explorer, Secretary and General Manager; W. H. F. HOLMES, Counsel; JOHN MURRAY, Electrician, Manager Yukon Telegraph Cable Co. **DIRECTORS:** HON. H. AYLMER, Barrister, M.P., Richmond, Canada; ALEX. MITCHELL, Board of Trade, Montreal, Canadian Representative; THOS. H. WICKES, Vice-President Pullman's Palace Car Co., Chicago, Ill.; W. N. D. WINNE, C. M. & St. P. R. R., Chicago, Ill.; C. S. KELSEY, Chicago & Alton Ry., Chicago, Ill.

Head Office:

Northwest Territory Office:
DAWSON.

**EQUITABLE BUILDING,
CHICAGO, ILL.**

Alaska Office:
DYEA.

Cable Address, Yukas.

The Northwestern Trust and Development Co.'s Business Undertaking.

REALIZING the situation in the Klondyke and the unprecedented trade opportunity for money making there presented, the Northwestern Trust and Development Company has decided to **at once** equip an expedition for the relief of the isolated miners and in the straight **business interests of its own shareholders**. The supplies selected by the Company for the Klondyke trade consist only of such food products and other articles as will find an immediate market and can be disposed of at **most highly remunerative rates**. It is well to emphasize the fact that the undertaking will be conducted throughout on a strictly business basis.

PROFITS.

After thorough investigation of every phase of the undertaking, as prepared by the practical experts in the employ of the Company—detailed explanatory statements of which are open to the inspection of shareholders—the Directors are satisfied that over \$300,000 of net profit can be promised on an investment of \$50,000 during the ensuing season alone.

Of this sum **\$126,624** will be derived from the sale of Merchandise.

\$90,000 from the Transport of Passengers.

\$62,130 from the Expressing of Valuables.

\$156,300 from the Expressing of Gold Dust, under proper protection and guarantee, from the interior to the coast.

It must be remembered that these figures represent only the earnings upon the investment after deducting the cost of Field Equipment, Management and Maintenance.

Thus it will be seen, that based upon the most conservative estimate, the **net profit on one season's work**, exclusive of the revenue arising from the operating of the Telegraph line, will amount to over **\$300,000**. Cutting this figure in two, the enterprise would still yield over **300 per cent.** upon the capital invested.

The expedition will be accompanied by Dr. Geo. A. Baynes, a graduate of McGill University, of Montreal, President of the Company, a physician and traveler of wide business experience in both temperate and frigid climates. He will establish the **business** upon a permanent basis and supervise the Company's interests.

THE TRANSPORT SERVICE.

Recognizing the fact that the only practical and available method of transportation to the Yukon in the winter months is overland from the coast by dog-train, with pack horses and horse-sleds as auxiliary, the Northwestern Trust and Development Company has arranged for the despatching of an "outfit" so constituted, from some point on the Lynn Canal, **immediately**.

This "outfit" will consist of several large "brigades" of dog-trains, with the necessary complement of pack-horses, manned by Indian and half-breed drivers and packers, secured in the Canadian Northwest and protected by special contract. The entire transport service will be under the direct management of Mr. Walter R. Nursey, the well-known traveller, and for seventeen years an explorer in the far Northwest. (See Chicago Sunday Tribune, January 2, 1898, page 34.)

From Mr. Nursey's practical knowledge of the various methods of sub-Arctic winter transportation, gained through his carrying of the mails and the freighting of Indian supplies into the remote interior, together with his executive capabilities, his identification with the undertaking is a guarantee of its success.

THE YUKON EXPRESS COMPANY.

The Trust Company will operate its Express business through the Yukon Express Company under Letters Patent from the Dominion Government, and having underwritten the stock of the Express Company, will retain a one-half interest in the same for the benefit of its stockholders.

As the Company will operate under the laws of the Canadian Government, ample police protection is assured, and it will thus be ready to enter into contracts for the carrying of the mails and Government supplies.

THE YUKON TELEGRAPH CABLE COMPANY.

In like manner the Trust Company will also operate its telegraph business under Letters Patent from the Canadian Government, and will construct a Telegraph Line between the Lynn Canal and various points in the Canadian Northwest Territory.

In this connection it will interest shareholders to know that the Associated Press, through its chief executive officers in Chicago, has already promised in advance to enter into a contract for a daily service, which in itself alone will yield a most handsome revenue.

SHARES.

Application for shares may be made to the President and Directors at the offices of Company, 713, 714 Equitable Building, Chicago, Ill.

Telephone 1947

Telephone 2933

THE BELLE LEWART



THE ONLY EXCLUSIVE DEALERS

IN LAKE SIMCOE ICE

OFFICE: 18 MELINDA STREET, OPP. NEW GLOBE BUILDING.

Telephone or Write for Full Part ulars

SANMETTO FOR GENITO-URINARY DISEASES.

A Scientific Blending of True Santal and Saw Palmetto in a Pleasant Aromatic Vehicle.

A Vitalizing Tonic to the Reproductive System.

SPECIALLY VALUABLE IN PROSTATIC TROUBLES OF OLD MEN—IRRITABLE BLADDER—CYSTITIS—URETHRITIS—PRE-SENILITY.

DOSE:—One Teaspoonful Four Times a Day.

WALTON CHEM. CO., NEW YORK.

NIAGARA FALLS LINE

STEAMER

“Empress of India”

Daily from Geddes' Wharf at 3.20 p.m., commencing May 16th, connecting at Port Dalhousie with fast through trains for St. Catharines, Niagara Falls, Buffalo, New York, Rochester, Cleveland and all points East, West and South.

Double Trips Commence about June 10th.

Tickets at all G.T.R. and Empress ticket offices, and at Wharf.

Telephone 260.

Excelsior Piano Album

CONTAINING

160 pages of choice and Standard Music by eminent composers

CONTENTS

Adieu.....(Schubert).....Heller	Mrs. Langtry's Waltz.....Operas
Amatori Waltz.....Conway	Melodie.....Rubinstein
America.....(God Save the Queen)	Minuet Mozart.....Schubert
Blacksmith in the Woods.....Richard	Marches et Marche.....Mozart
British Patrol.....Asch	Nippon.....Jostly
Blacksmith in the Woods.....Richard	Old Oaken Bucket.....Cramer
Black Hawk Waltz.....Waltz	Pilgrims Chorus from "Tannhauser".....Wagner
Barboid Galop.....Stanley	Pearly Dew Drops Mazurka.....Birocc
Crimson Blushes Mazurka.....Conroy	Polish Dance.....Scharwenka
Dude's Galop.....Sweeny	Rhapsodie Hongroise.....Maysels
El Fresco Galop.....Garland	Racquet Waltz.....Haley
Funeral March of a Marionette.....Gowood	Royal Waltz.....Waltz
Paer Elise.....Berthouze	Shepherd Boy.....Wilson
Forget Me Not (Gavotte).....Giesz	Serenade.....(Schubert).....Krieg
Gavotte Stephanie.....Catsbulka	Society Polka.....Eaton
Henry Irving's March.....Cox	Serenata.....Mosakowski
Henry's Longings.....Jungmann	Slumber Song.....Schumann
La Paloma.....Cramer	Snow Drift Waltz.....Sisk
La Caravane.....Asch	

PRICE - 50 CENTS

A. & S. NORDHEIMER

TORONTO

MONTREAL

HAMILTON

[OVER]

ASSESSMENT SYSTEM.



COST TO JOIN THE I. O. F.

A Candidate for initiation into an existing Court, and taking \$1,000 of Mortuary Benefit, must pay the following fees:—

- 1.—The Deposit Fee, which must accompany his Application for Membership..... \$1.00
 - 2.—The Initiation Fee, which must be not less than..... 2.00
 - 3.—The Registration Fee, which is 50 cents for each \$500 of Mortuary Benefit taken, 1.00
 - 4.—The Certificate Fee, which pays for the Certificate of Membership..... 1.00
 - 5.—The Medical Examination Fee, which is..... 1.50
- \$6.50

- If taking \$2,000 Mortuary Benefit, the cost would be..... \$8.00
- If taking \$3,000 Mortuary Benefit, the cost would be..... 9.00
- If taking \$4,000 Mortuary Benefit, the cost would be..... 11.00
- If taking \$5,000 Mortuary Benefit, the cost would be..... 12.00

THE BEST FRATERNAL SOCIETY IN THE WORLD

THE MAGNIFICENT BENEFITS PAID.

Benefits paid last year (1896).....	\$ 820,941 91
Benefits paid last five years.....	2,754,039 14
Benefits paid last ten years.....	3,462,142 79
Benefits paid from organization to 31st October, 1897.....	4,925,244 12

THE GROWTH OF THE MEMBERSHIP.

Membership 1st July, 1881.....	369	Date of Re-organization.....	650
Membership 31st Dec., 1881.....	1,019	Increase, 6 months.....	4,785
Membership 31st Dec., 1886.....	5,804	Increase, 5 years.....	26,499
Membership 31st Dec., 1891.....	32,303	Increase, 5 years.....	70,535
Membership 31st Dec., 1896.....	102,838	Increase, 5 years.....	

THE INCREASES DURING 1896.

Increase in Benefits Paid.....	\$ 135,941 73
Increase in Assessment Income.....	228,932 00
Increase in Total Income.....	347,901 19
Increase in Net Assets.....	438,114 34
Increase in Surplus Funds.....	455,110 92
Increase in Assurance in Force.....	20,763,500 00

THE MEMBERS AND THEIR ASSURANCE
At 31st December Each Year.

Year.	Total Membership.	Assurance Carried.	Total Surplus.	Surplus per Capita.	Death Rate per 1000
1881	1,019	\$ 1,140,000	\$ 4,563 55	\$ 4 48	4.50
1882	1,134	1,276,000	2,967 93	2 61	11.00
1883	2,210	2,490,000	10,857 65	4 91	4.73
1884	2,558	2,923,000	23,081 85	9 02	4.23
1885	3,642	4,283,000	29,802 42	8 18	7.76
1886	5,804	6,764,000	53,981 28	9 30	4.85
1887	7,811	9,120,000	81,384 41	10 41	5.78
1888	11,800	13,714,000	117,821 06	9 98	6.43
1889	17,349	20,078,000	188,130 36	10 84	5.85
1890	24,604	28,498,000	283,067 20	11 54	5.18
1891	32,303	39,395,000	408,798 20	12 65	6.40
1892	43,024	53,243,000	580,597 85	13 49	6.25
1893	54,484	67,781,000	828,857 89	15 76	5.47
1894	70,055	86,506,500	1,187,225 11	16 94	5.47
1895	86,521	108,027,500	1,560,373 46	18 03	5.67
1896	102,838	128,791,000	2,015,484 38	19 60	5.50

For further Information, Literature, etc., apply to

ORONHYATEKHA, M.D., S.C.R.,
Toronto, Canada.

HON. D. D. AITKEN, S.V.C.R.,
Flint, Mich.

JOHN A. MCGILLIVRAY, Q.C.,
Supreme Secretary,
Toronto, Canada.

A. E. STEVENSON, American Agent,
6340 Monroe Avenue, Chicago, Illinois.

JAMES MARSHALL, General Manager
for Great Britain,
24 Charing Cross, London, England.



USE ONLY THE GREAT

Ball Nozzle Syringe ❁ ❁



Accomplishes wonders for the health of women.

Cleanses thoroughly the cul-de-sac.

Endorsed by the highest medical authority.

Send for Private Circular.



MANUFACTURED BY

The Ball Nozzle Company of Toronto, Limited

ROOM 1, CONFEDERATION LIFE BUILDING

TORONTO, ONT.

Electricity

AND UP-TO-DA E



A few Bargains for May, June and July.

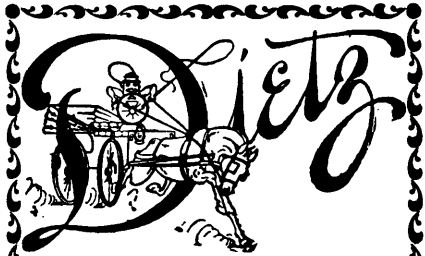
- Only **\$8.75** for our Standard Milliamper Meter. Can be used with any Battery. Regular price, \$17.50.
- Only **\$30.00** for a Fine Wall Cabinet, with bevelled-plate glass in doors, Galvanic Circle, High Tension Coil, with adjustable Rheotome, Rheostat for Light, Pole Changer, Selecting Switches, etc. Others ask \$65.00 to \$90.00.
- Only **\$18.50** for an Elegant Table Plate in highly polished Oak Case, bevelled-plate glass in cover, Galvanic Circle, High Tension Coil with Adjustable Rheotome, Pole Changer, etc. Others ask \$27.00 to \$35.00.
- Only **\$13.50** for a good Cautey Battery.
- Only **\$4.50** for a Dry Cell Portable Faradic Battery, with large Coil, Indicator and adjustable rapid and slow Vibrator and full set of Electrodes. Regular price, \$10.00. Send 2-cent stamp for Catalogue of Faradic, Galvanic and Cautey Batteries, Cabinets, X-Ray Machines, etc.

INSTRUMENTS

Electro-Medical Mfg. Co.,

Dept. 18.

S. E. Corner 59 and Wallace Streets,
CHICAGO, ILL.



THE DIETZ DRIVING LAMP

Is about as near perfection as 50 years of Lamp-Making can attain to. It burns kerosene, and gives a powerful, clear, white light, and will neither blow nor jar out. When out driving with it the darkness easily keeps about two hundred feet ahead of your smartest horse. When you want the very best Driving Lamp to be had, ask your dealer for the "Dietz."

We issue a special Catalogue of this Lamp, and, if you ever prow! around after night-fall, it will interest you. 'Tis mailed free.

R. E. DIETZ CO.,
60 Laight St., New York.

Established in 1840.

Beaver Line Royal Mail Steamships

Sailing Weekly Between

Liverpool and Montreal, - in Summer
Liverpool and St. John, N.B. - in Winter

Calling at Moville and Halifax to land and embark Passengers and Mails in winter, and Rimouski and Moville in summer.

From Liverpool, every Saturday.

From Montreal or St. John, every Wednesday.

"LAKE ONTARIO," "LAKE SUPERIOR,"

"LAKE HURON," "LAKE WINNIPEG," "GALLIA."

These steamers have been built specially for the North Atlantic Passenger trade and have excellent accommodation for all classes of passengers.

Rates of passage to Liverpool—1st cabin, \$50 and \$55. Round trip, \$100 and \$114. 2nd cabin, to Liverpool or London, \$34. Round trip, \$66 75.

Steerage at lowest rates, including complete outfit.

Special rail rates to and from all points.

Passengers via St. John travel by Canadian Pacific Short Line, trains running alongside steamers at Carleton (St. John West Side), thus avoiding transfer of themselves and baggage.

AGENTS:

D. W. CAMPBELL, Mgr. **D. & C. MACIVER, Mgrs.,**
18 Hospital St., Montreal. Tower Building, Liverpool.



"MANITOU"

The accompanying analysis was made by Professor Elwyn Waller, Ph.D., Analytical Chemist, New York. Medical men will at once see what a valuable therapeutic agent MANITOU water will prove in cases of rheumatic diathesis, dyspepsia and liver and kidney complaints. *The Medical Profession are respectfully asked to examine the merits of this water and recommend it in suitable cases.*

Absolutely natural, and the only water on the American Continent bottled recharged solely with its own gas.

ANALYSIS	
Sodium Chloride	2.983
Potassium Sulphate	1.336
Sodium Sulphate	1.268
Sodium Bicarbonate	8.956
Lithium Bicarbonate	0.162
Calcium Bicarbonate	13.889
Magnesium Bicarbonate	3.624
Iron Oxide	0.003
Alumina	0.009
Silica	0.312

SWAN BROS., 162-164 KING ST. EAST

PHONE NOS., 937 - 1818.

TORONTO, ONT.

31.752

DOCTOR

SEND FOR SAMPLE COPY

Your library is not complete without the HYPNOTIC MAGAZINE. Cost of this handsome monthly, including premium book on SUGGESTIVE THERAPEUTICS, is only One (\$1.00) a year.

THE PSYCHIC PUBLISHING CO., 56 5th Avenue Chicago.

Special Attention given to Orders from Physicians.

COAL AND WOOD For Cash And Present Delivery.

PRICES REDUCED

Best Hardwood, long	\$5 00	Slabs, long	\$3 00
Best Hardwood, cut and split	5 50	Slabs, cut and split	3 50
Best No. 2 Mixed Wood, long	3 50	Stove	} AT LOWEST PRICES.
Best No. 2 Mixed Wood, cut and split	4 00	Nut	
Pine No. 1, long	4 00	Egg	
Pine No. 1, cut and split	4 50	Grate	

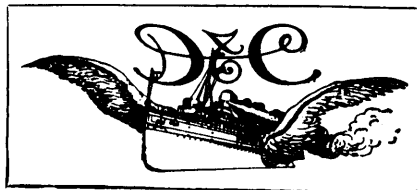
HEAD OFFICE: Cor. Bathurst St. and Farley Ave. Phone 5393.
BRANCH OFFICE: 429 Queen Street West. Phone 2381.

WILLIAM MCGILL & CO.

FOR A SUMMER CRUISE TAKE THE COAST LINE

To Mackinac

NEW STEEL
PASSENGER
STEAMERS



COMFORT,
SPEED
and SAFETY

The Greatest Perfection yet attained in Boat Construction — Luxurious Equipment, Artistic Furnishing, Decoration and Efficient Service.

To Detroit, Mackinac, Georgian Bay, Petoskey, Chicago

No other Line offers a panorama of 460 miles of equal variety and interest.

FOUR TRIPS PER WEEK BETWEEN

Toledo, Detroit and Mackinac

PETOSKEY, "THE SOO" MARQUETTE AND DULUTH.

LOW RATES to Picturesque Mackinac and Return, including Meals and Berths. Approximate Cost from Cleveland, \$17; from Toledo, \$14; from Detroit, \$12.50.

DAY AND NIGHT SERVICE BETWEEN

DETROIT AND CLEVELAND

Fare, \$1.50 Each Direction.

Berths, 75c. \$1. Stateroom, \$1.75. Connections are made at Cleveland with Earliest Trains for all points East, South and Southwest, and at Detroit for all points North and Northwest. Sunday Trips June, July, Aug., Sept. Oct. Only

EVERY DAY AND NIGHT BETWEEN

CLEVELAND, PUT-IN-BAY AND TOLEDO.

Send 2c. for Illustrated Pamphlet. Address
A. A. SCHANTZ, e. p. a., DETROIT, MICH.

Detroit and Cleveland Navigation Company.

EVERY PHYSICIAN SHOULD HAVE A

Premo Camera

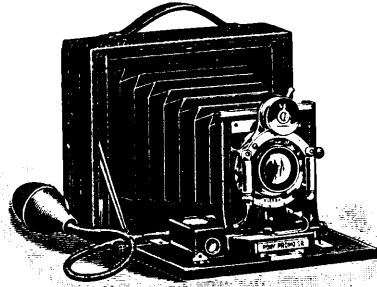
Records of interesting cases may be kept by means of photographs, which are easily made with a

Premo

We furnish complete instructions and guarantee success.



Write for Catalogue "P." . . .



Rochester Optical Co., - Rochester, N.Y.

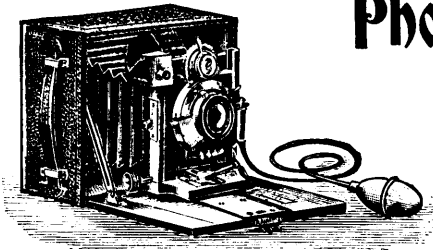
GUNDLACH OPTICAL CO.

OF ROCHESTER, N.Y.

Manufacturers of . . .

Photographic

Apparatus



The only concern in the United States turning out a complete Camera, Lens and Shutter all of their own manufacture.

Our LENSES are world renowned. Our SHUTTERS lead.
Our CAMERAS are unsurpassed in workmanship or finish.

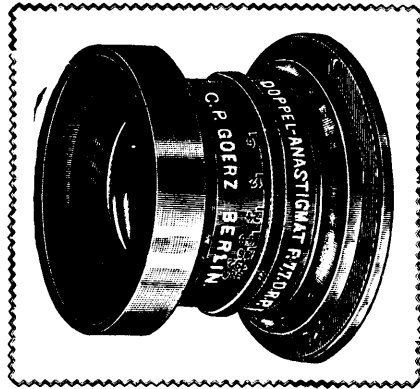
SEND FOR CATALOGUE.



GUNDLACH OPTICAL CO.

753 to 765 South Clinton Street, ROCHESTER, N.Y.

THE
LEADING MEMBERS
OF THE
MEDICAL PROFESSION
USE THE



Goerz Double Anastigmat Lenses

On account of their Microscopical Definition, Unequalled
Covering Power and Rapidity



Apply for Illustrated Catalogue and Prices to

C. P. GOERZ

52 Union Square East

MANUFACTORY IN BERLIN

NEW YORK

The "Universal"
**Pulmonary
 Inspirator**

IMPROVED

A Scientific and Rational
 Method of Inhalation
 for Treating

**Phthisis,
 Bronchitis,
 Asthma,
 Pneumonia, etc.**

**Exclusively a
 Physician's
 Instrument.**

Sold only to the Profession



Endorsed by Hospitals,
 Specialists, and General
 Practitioners.

IN SUCCESSFUL USE
 AT THE
Loomis Sanitarium
 for Consumptives
 AT LIBERTY, N. Y.

**G. B. Underwood
 & Co.**
 15 East 14th Street
 New York City.

New illustrated
 pamphlet sent on
 application, men-
 tioning this paper.

Thorough Acquaintance

BRANCHES:

WINDSOR
 HOTEL
 BLOCK,
 MONTREAL,
 QUE.

WINNIPEG
 RUBBER CO.
 WINNIPEG,
 MAN.

BARRINGTON
 STREET,
 HALIFAX.

with every detail from the tree to the factory, and then through the factory, is the whole story of good tires.

You cannot make good tires if rubbish enters into their composition, or slipshod mechanics are engaged in their manufacture. From the well-nurtured tree which furnishes the crude material, on through all the many processes of manufacture, thoroughness must be observed, and it is our inexorable law to retain only most efficient workmen. No others can busy themselves on

Hartford and Vim Tires

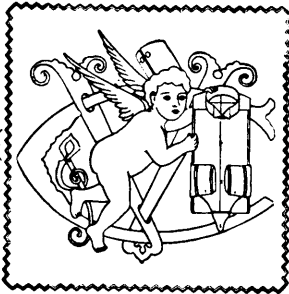
No wonder they always score 100 points. That means they are perfection.

TORONTO TIRE CO., LIMITED

9 Adelaide Street West, TORONTO, ONT.

We Know How

AND WE DO IT



Our Celebrated Finish on Linen has made us the **LEADING LAUNDERERS IN CANADA**

OUR MOTTO:
GOOD WORK, PROMPT DELIVERY

The Parisian Steam Laundry Company
OF ONTARIO, LIMITED

67 Adelaide Street, W., - - TORONTO

PHONE 1127

E. M. MOFFATT, Manager

A Cheap Horse.



An owner of a horse exchange said that the price of horses had gone down of recent years "because of the electric cars in the cities and bicycles in the country."

Doctors in towns and cities use bicycles now, and to ensure the safety of their patients they insist on Dunlop-tired mounts.

DUNLOP TIRES

CAN BE FIXED QUICK

NEW YORK SCHOOL OF CLINICAL MEDICINE

Clinical instruction to graduates in medicine at the school and at the various institutions with which the professors are connected. The school offers the following: 1.—Strictly limited classes, enabling each member to obtain personal instruction 2.—Members of classes act as assistants in the clinics, examine and treat patients, and perform operations under the direction of the professors.

PROFESSORS:

Surgery: CARL BECK, M.D.
Surgery: THOS. H. MANLEY, M.D.
Laryngology: T. W. BUSCHE, M.D.
Pediatrics: S. HENRY DESSAU, M.D.
Pediatrics: LOUIS FISCHER, M.D.
Gynecology: AUGUSTIN H. GOELET, M.D.

Dermatology: WM. S. GOTHRIE, M.D.
Ophthalmology: HENRY S. OPPENHEIMER, M.D.
Ophthalmology: FRANKLIN D. SKEEL, A.M., M.D.
Genito-Urinary Diseases: FERD. C. VALENTINE, M.D.
Dermatology: LUDWIG WEISS, M.D.
Practice of Medicine: A. P. ZAMANSKY, M.D.

This school of special instruction for practitioners of medicine and surgery is modeled upon the plans of the most successful European institutions, modified to suit the practical requirements of American physicians. No didactic lectures are delivered.

All teaching is individual.

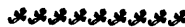
Courses may be commenced at any time in classes that are not filled.

The classes are no larger than will allow each member to personally treat as many patients as he possibly can.

The members of classes act as assistants and operate under the guidance of their teachers. Special attention is given to the most modern methods of diagnosis and treatment of the cases which the practitioner encounters daily.

The satisfactory results obtained obliges the school to continually increase its teaching facilities, as will be announced from time to time.

For further particulars, address:



FERD. C. VALENTINE,

328 West 42nd Street, NEW YORK.

Sec'y N.Y. School of Clinical Medicine.

NEW YORK POLYCLINIC MEDICAL SCHOOL AND HOSPITAL

A CLINICAL SCHOOL FOR GRADUATES IN MEDICINE AND SURGERY ❁ ❁ ❁ ❁

THE New York Polyclinic is a school for teaching graduates the most recent methods of diagnosis and treatment in every department of medicine. The clinical material is abundant and the Hospital wards adjoin the lecture-rooms. Since the fire in 1896 a new building has been erected and thoroughly equipped and the Institution is now prepared to offer better facilities than ever. Students may enter at any time.

FACULTY

SURGERY.—Robert H. M. Dawbarn, M.D., George R. Fowler, M.D., W. W. Van Arsdale, M.D., John A. Wyeth, M.D., W. R. Townsend, M.D., James P. Tuttle, M.D.

MEDICINE.—Isaac Adler, M.D., Wm. H. Katzenbach, M.D., R. C. M. Page, M.D., W. W. Van Valzah, M.D.

GYNÆCOLOGY.—J. Riddle Goffe, M.D., Florian Krug, M.D., Paul F. Munde, M.D., Wm. R. Pryor, M.D., W. Gill Wylie, M.D.

DISEASES OF CHILDREN.—L. Emmett Holt, M.D., August Seibert, M.D.

DERMATOLOGY.—Ed. B. Bronson, M.D., Andrew R. Robinson, M.D.

OPHTHALMOLOGY.—Wilbur B. Marple, M.D., David Webster, M.D.

LARYNGOLOGY AND RHINOLOGY.—Morris J. Asch, M.D., D. Bryson Delavan, M.D., Joseph W. Gleitsmann, M.D.

OTOLOGY.—Robert C. Myles, M.D., Oren D. Pomeroy, M.D., J. E. Sheppard, M.D.

DISEASES OF THE MIND AND NERVOUS SYSTEM.—Landon Carter Gray, M.D., B. Sachs, M.D.

OBSTETRICS.—Edward A. Ayers, M.D.

For further information apply to **W. R. TOWNSEND, M.D., Secretary,**
214 to 218 East 34th Street, New York City.

Detroit College of Medicine

SEPARATE
DEPARTMENTS OF

Medicine,
Pharmacy,
Dentistry,
Veterinary Surgery

Thorough Courses and complete equipments in all departments.

Excellent corps of teachers.

Hospital and clinical facilities unsurpassed.

Send for Catalogues to

H. O. Walker, M.D.
Secretary

Detroit, Mich.

ENGLISH TAILORING.....

Messrs. Wacks Bros.

LEICESTER, ENGLAND

Have pleasure in notifying their friends in the Canadian Medical Profession that they are prepared to execute High-Class Bespoke Tailoring at Popular Prices. Patterns and Measurement Forms mailed free. The Pattern attached is a sample of our \$10.00 Suits

GENTS' SUIT to measure, as Fig. 1, 2, or 3, - - \$10.00



FIG. 1
LOUNGE

THESE SUITS
ARE ALL
**PURE
WOOL**
GUARANTEED



FIG. 2
REEFER

FROCK COAT SUIT, as Fig. 4, \$12.00

How to Obtain English Tailoring

Write us for Patterns and Measurement Form, stating height, and chest measurement **OVER THE VEST**; also style of garment required. We will cut and forward, with patterns, a linen coat to try on yourself. When replying inform us as to fit and style. We can correct pattern before cutting the cloth. By adopting this system we can guarantee **A PERFECT FIT**.

NOTE.—All garments are made in our own workshops by skilled English tailors. Coats lined best Italian Cloth and Sateen Sleeve Lining. Each suit is carefully packed and forwarded in separate box.

CUSTOM TARIFF

35 per cent. ad valorem.

A \$10.00 suit of clothes will cost the wearer \$3.50. Custom duties cannot be prepaid, but are collected on delivery.

FORWARDING

The cost of sending a suit of clothes (average 6 lbs.) by Parcel Post from our warehouse to any address in Ontario is 76c. But six suits sent to one address would only cost \$3.00.

Our Terms are Strictly Cash. Remittances must accompany the order.

REFERENCES—National Provincial Bank of England, Leicester.



FIG. 4
FROCK COAT



FIG. 3
MORNING COAT

WACKS BROS., Manufacturers, - LEICESTER, ENGLAND

POST-GRADUATE COURSE.

McGILL UNIVERSITY, Montreal.

FACULTY OF MEDICINE.

The third special short course of instruction for general practitioners has been arranged by the members of the Faculty of Medicine of McGill University. This course begins **Tuesday, May 3rd**, and closes **June 11th, 1898**. It will consist of:

(A) Evening Lectures

Four per week on the recent advances in Medicine and Surgery, by Professors Wm. Gardner, Roddick, Stewart, Shepherd, Bell, Wilkins, Adami, Lafleur, Finley, Armstrong and others.

(B) Regular General Clinics

Four per week on groups of cases in the Montreal General Hospital Medical Wards, by Professors Flackader and Lafleur; in the Surgical Wards by Professor Shepherd and Dr. Elder.

In the Royal Victoria Hospital Medical Wards by Professor Stewart and Dr. Martin; in Surgical Wards by Professor Bell and Dr. Garrow.

(C) Regular Clinics on Special Departments of Medicine and Surgery

Ophthalmology in the Royal Victoria Hospital, by Professor Buller; in the Montreal General Hospital, by Dr. J. Gardner; Dermatology, Professor Shepherd; Genito-Urinary Surgery, Professor Bell; Orthopedics, Dr. C. W. Wilson; Laryngology, Professor Birkett; Gynæcology, Professor Wm. Gardner and Dr. Webster in the Royal Victoria Hospital, and Dr. Lockhart in the Montreal General Hospital; these will be given once or twice a week.

(D) Special Demonstrations

One or more as required, on Modern Treatment of Diphtheria, Professor Finley; Pelvimetry and Aseptic Midwifery (at Montreal Maternity Hospital), Professor J. C. Cameron; Mental Diseases (at Verdun Asylum), Dr. T. J. W. Burgess; Medico-Legal Autopsy Methods, etc., Dr. Wyatt Johnston; Clinical Use of Roentgen Rays, Professor Girdwood.

(E) Laboratory Courses

For which a small extra fee will be charged to cover cost of material. These courses will include Operative Surgery, Professor Armstrong; Clinical Bacteriology, Professor Adami; Clinical Microscopy of Dejecta and Blood, Dr. J. C. Martin; Clinical Chemistry, Professor Ruttan; and Post-mortem Methods, Dr. Wyatt Johnston, etc.

(F) Laboratory Demonstrations

On the Physiology of Morbid Anatomy, Professor Adami; Medical and Surgical Anatomy, Dr. McCarthy; Microscopical Methods, by Dr. Gunn; Urinalysis, Professor Ruttan; Serum Therapy, Serum Diagnosis of Typhoid, etc., Drs. Wyatt Johnston and Martin.

The morning of each day will be devoted to demonstrations in the College and Special Clinics. The afternoons to the Hospitals.

The above course of instruction is given wholly apart from the regular Lectures, Clinics, etc., for undergraduates in Medicine.

The Fee for the Full Course, including Hospital Fees	-	\$50 00
The Fee for the Course of Twenty-four Lectures alone (Eventngs)	-	\$10 00
For Any Set of Six Lectures	-	\$5 00

Practitioners who purpose attending this Course may obtain time-tables and fuller details on application after end of March, to

Professor R. F. Ruttan, M.D.,
Registrar, Faculty of Medicine.

VACCINE VIRUS PURE AND RELIABLE
 ANIMAL VACCINE LYMPH. FRESH DAILY.
 10 IVORY POINTS, - \$1.00 10 QUILL SLIPS, - \$1.00.
 Orders by Mail or Telegraph Promptly Despatched.

NEW ENGLAND VACCINE CO. - Chelsea Station, BOSTON, MASS.
 WM. C. CUTLER, M.D. J. F. FRISBIE, M.D.
 Send for Variola-Vaccina—60 Page New Illustrated Pamphlet Mailed Free.

J. A. SUTHERLAND

MANUFACTURER OF

CABINETS, MANTELS, and all lines in ARTISTIC FURNITURE

Medicine Cases and Office Furniture Made to Order

Repairing Promptly
Attended to.

409 SPADINA AVENUE, TORONTO

A. MACDONALD,

Custom Work
a Specialty.

.. Merchant Tailor ..

N.B.—I have in the past done a large trade with the medical men, and will be most pleased to have them call upon me in the future. They will find my prices right.

355 Yonge Street, Toronto.

We direct the attention of the
Medical Profession to . . .

COWAN'S

HYGIENIC

... COCOA

specially useful for convalescing
. . . patients . . .

ONTARIO

Vaccine Farm

ESTABLISHED 1886

Pure and Reliable Vaccine Matter
always on hand. Orders by mail or
otherwise promptly filled.

10 Ivory Points, \$1.00; 5 Ivory Points,
65 cts.; single Points, 20 cts.

Address all orders: VACCINE FARM,
A. STEWART, M.D. Palmerston, Ont.

ROBERT ELDER

Cor. Soho and Phoebe Sts.,
..... TORONTO

Carriage Builder

TELEPHONE 1776

Will the members of the Medical Profession
call and give me a trial?

DOCTORS' Horses boarded
and carefully looked after.

All Traps kept in separate
barn, away from ammonia. *

* Night Carriages FOR PHYSICIANS'
USE a specialty.

GERRARD ST. LIVERY,

PHONE 2736 208 GERRARD ST. E.
TORONTO.

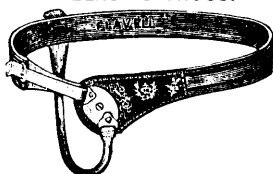
FLAVELL'S Elastic Trusses

FITTED WITH OUR
CELEBRATED
Pneumatic Pads

Can be worn day and night with comfort and ease, which is quite an advantage to be sought for in all cases of rupture, as a cure can be effected if truss is worn at all times.

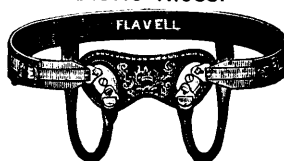
WE SOLICIT THE PHYSICIANS' PATRONAGE DIRECT.

ELASTIC TRUSS.



DIRECTIONS FOR ORDERING.—Give circumference of abdomen on the line of rupture. State if for Single or Double, Right or Left.

ELASTIC TRUSS.



25% Discount to
Physicians.

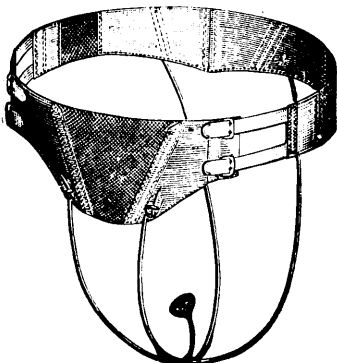
SINGLE TRUSSES.

	Adult's 28 to 42.	Youth's 22 to 28.	Child's 12 to 21
A, Plain - each,	\$3.00	\$2.00	\$1.50
B, Fine - "	3.50	2.50	1.75
C, Silk - "	4.00	3.00	2.00

DOUBLE TRUSSES.

	Adult's 28 to 42.	Youth's 22 to 28.	Child's 12 to 21
A, Plain - each,	\$5.00	\$3.00	\$2.50
B, Fine - "	6.00	4.00	3.00
C, Silk - "	7.00	5.00	4.00

FLAVELL'S IMPROVED UTERINE SUPPORTER



\$4.00

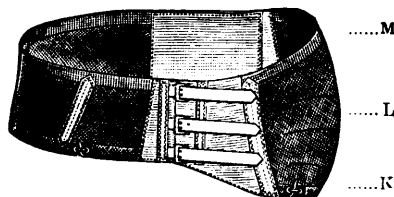
SATISFACTION ASSURED.

DIRECTIONS FOR ORDERING.—Give circumference of abdomen 2 inches below the navel, and state if for Prolapsus, Anteversion or Retroversion.

Flavell's Abdominal Supporters

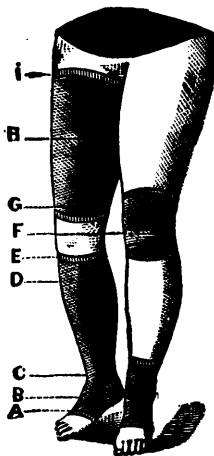
DIRECTIONS FOR MEASUREMENT.

Please give exact circumference of body at K. L. M.



Silk Elastic - - - each, \$5.00
Thread Elastic - - - " .50

ELASTIC STOCKINGS, ETC.



	Stout Silk—Each.	Fine Silk—Each.	Thread—Each
Stocking from A to E.....	\$3 50	\$3.00	\$2.00
" " A to G.....	6.00	5.00	3.50
" " A to I.....	8.00	7.50	6.00
Knee Cap from E to G.....	2 50	2.00	1.50
Legging " C to E.....	2 50	2 00	1.50
Anklet " A to C.....	2.50	2.00	1.50

Directions for Measurement.—Give exact circumference and length in all cases. We allow for expansion.

25% Discount to Physicians.

GOODS SENT BY MAIL UPON RECEIPT OF PRICE

.. Safe Delivery Guaranteed ..

G. W. FLAVELL & BRO., Manufacturers
1005 Spring Garden Street * PHILADELPHIA, PA.

WHEELER'S TISSUE PHOSPHATES

Wheeler's Compound Elixir of Phosphates and Calisaya.

A Nerve Food and Nutritive Tonic for the treatment of Consumption, Bronchitis, and the active Principles of Calisaya and Wild Cherry.

Scrofula, and all forms of Nervous Debility. This elegant preparation combines in an agreeable Aromatic Cordial, *acceptable to the most irritable conditions of the stomach*: say—Bone Lime Phosphate, Soda Phosphate, Iron Phosphate, Phosphoric Acid, and the active Principles of Calisaya and Wild Cherry.

The special indication of this combination of Phosphates in Spinal Affections, Caries, Necrosis, Ununited Fractures, *Marasmus*, Poorly Developed Children, Retarded Dentition, Alcohol, Opium, Tobacco Habits, Gestation and Lactation, to promote Development, etc., and as a *physiological restorative* in Sexual Debility, and all used-up conditions of the Nervous System, should receive the careful attention of good therapists.

NOTABLE PROPERTIES—As reliable in Dyspepsia as Quinine in Ague. Secures the largest percentage of benefit in Consumption and all Wasting Diseases, *by determining the perfect digestion and assimilation of food*. When using it, Cod Liver Oil may be taken without repugnance. It renders success possible in treating chronic diseases of Women and Children, who take it with pleasure for prolonged periods, a factor essential to maintain the good-will of the patient. Being a Tissue Constructive, it is the best *general utility compound* for Tonic Restorative purposes we have, no mischievous effects resulting from exhibiting it in any possible morbid condition of the system.

DOSE. For an adult, one table-spoonful three times a day, after eating; from seven to twelve years of age, one dessert-spoonful; from two to seven, one teaspoonful; for infants, from five to twenty drops, according to age.

Prepared at the Chemical Laboratory of T. B. WHEELER, M.D., Montreal, P.Q.

To prevent Substitution, put up in Pound Bottles only and sold by all Druggists at One Dollar.

READ THE PAMPHLET SENT YOU

GEORGETOWN UNIVERSITY

MEDICAL DEPARTMENT

Forty-eighth Session opens October 4, 1897, and will continue until May 12, 1898. Instruction is given by lectures, recitations, clinical teaching, and practical demonstrations. In the subjects of Anatomy, Chemistry, Physiology, Hygiene, Histology, Pathology, and Bacteriology special practical instruction is given in well-equipped laboratories. Excellent and ample clinical facilities are furnished. For annual announcement, address the Dean,

G. L. MAGRUDER, M.D., 815 Vermont Avenue, Washington, D.C.

H. M. STEVENSON



" BRILLIANT
SIGN LETTER "

Practical Sign Writer—White Enamel Letters—Estimates furnished on all kinds of Glass, Wood and Brass Signs, Wire Screens, etc.

N.B.—As the Brilliant Letters are especially adapted for Physicians' use, I wish to draw the attention of the profession to them, and will be pleased to call on receipt of message by telephone or mail.

PHONE, 2356.

46 Adelaide Street East, TORONTO

The Federal Life Assurance Co.

HEAD OFFICE: HAMILTON, ONT.

Guaranteed Capital, - - - \$700,000.00.

Amount Assured - - - \$11,000,000.00

Surplus Security to Policy-holders \$704,141.26

Returned to Policy-holders over 750,000.00

Most Liberal Policies. Age having been admitted, there is NO CONDITION but payment of Premiums after the First Year. Inquire for the "Accumulation Policy," the "Compound Investment Policy," or the "Guaranteed Four-per-cent. Insurance Bond."

JAS. H. BEATTY,
(North-West Transportation Line)
President.

DAVID DEXTER,
Managing Director.

DOCTOR!! Do you want a good Smoking Tobacco?
If so, try

OLD GOLD...



Virginia Flake Cut

**Smoking
Tobacco**

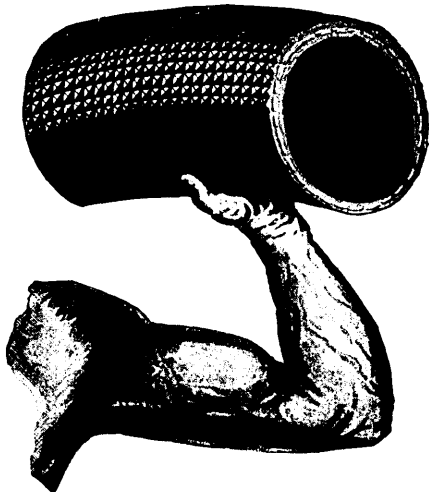
W. S. KIMBALL & CO.,
Rochester, N. Y., U.S.A.

17 First Prize Medals.

Samson New York TIRES

RIDE

Rapidly
Restfully
Resiliently



Write for Catalogue.

NEW YORK TIRE CO.
50 Wellington Street West
TORONTO, ONT.

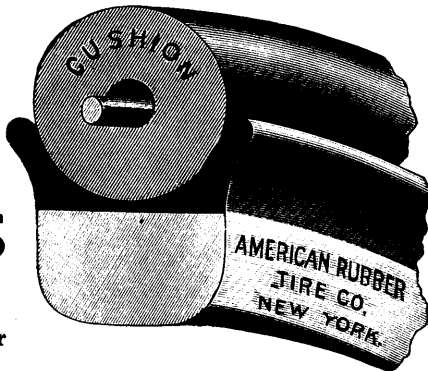
Important to Physicians.

CUSHION
RUBBER

CARRIAGE TIRES

Specially adapted
to the
Busy
Physician's
Use and Comfort

Guaranteed for
One Year



CUT FULL SIZE INCH CUSHION TIRE

Applied to old or new wheels. FIVE SIZES, 1, 2, 1, 1, 11.—will last THREE YEARS, guaranteed for one year. Apply to our New York factory or to our licensees in all principal cities.

Also the Best Pneumatic, and the Celebrated Non-Creeping Solid Rubber Tires.

SEND FOR CATALOGUE
AND PRICE LIST

AMERICAN RUBBER TIRE CO.

131 West 38th Street, Cor. Broadway, New York

Fascinating
as Fiction

Dramatists
Novelists

GREATEST WORK OF THE AGE

THE LIBRARY OF ❁❁❁❁

Historic Characters and Famous Events

OF ALL NATIONS AND ALL AGES ❁❁

Edited by AINSWORTH R. SPOFFORD
Of the National Library, Washington

Assisted by PROF. J. P. LAMBERTON, of Philadelphia,
and FRANK WEITENKAMPE, of the Astor Library, N. Y.

Two Thousand Volumes Condensed into Ten.

The work is rich with beautiful illustrations, including one hundred full page photogravures, and many engravings scattered through the text

THE BUSY MAN OF AFFAIRS

finds a refreshing relief from former readings of ponderous encyclopedias and other historical works in the Library of Historic Characters and Famous Events of All Nations and All Ages.

FOR THE TEACHER

possessing the Library of Historic Characters and Famous Events of All Nations and All Ages there is a fund of valuable data, presented in convenient, concise and complete form, that gives an exceptional equipment for instruction in the study of the lives of the world's famous men and women.

THE STUDENT

who has access to the Library of Historic Characters and Famous Events of All Nations and All Ages is entertained as well as instructed by the pleasing variety and great literary merit of this work.

WITH THE CHILD AT HOME

the Library of Historic Characters and Famous Events of All Nations and All Ages acts as a powerful magnet, drawing him unconsciously from cheap and valueless literature to the absorbing stories of the great characters whose words and deeds have left their impress upon the history of the world.

THIS work is of special value to the Physician who does not have the time or opportunity to keep himself posted on what has been done to make the world what it is to-day.

For full Particulars address

VIRTUE & CO.

10 Adelaide St. East, Toronto.

NOTE.—We have made arrangements with the Agents for Canada whereby subscribers to this Journal will be given special prices and terms.

Conquerors
Warriors

Statesmen
Patriots

12th YEAR.

R. L. POLK & CO.'S

MEDICAL AND SURGICAL REGISTER

OF THE UNITED STATES AND CANADA

THIS IS POSITIVELY THE ONLY

NATIONAL

MEDICAL DIRECTORY PUBLISHED

Embraces names of over 112,000 Physicians,
with College of Graduation, list of Colleges,
Societies, Boards of Health, Journals, Mineral
Springs, Hospitals, Sanitariums, Asylums and
other Medical Institutions; also Medical Laws
of each State.

✍ Physicians who have not given their names to our canvassers for insertion in the Register are requested to send them to R. L. POLK & CO., Detroit, Mich., immediately.

BELLEVUE HOSPITAL MEDICAL COLLEGE,
NEW YORK.

MESSRS. R. L. POLK & CO.

DEAR SIRS,—Your "Medical and Surgical Directory" we find almost invaluable. It should be in the hands of every physician in active practice, especially in the hands of physicians who are much called in consultation or who have extensive professional correspondence. I have been surprised to find so few errors and omissions. I write now to ask whether you have received sufficient encouragement from the sale of the book to justify you in publishing corrected editions each year. . . . Yours respectfully,

AUSTIN FLINT, M.D.,
Secretary of Faculty, Bellevue Hospital Medical College.

We have hundreds of similar letters from leading physicians of the United States.

R. L. POLK & CO., Publishers,

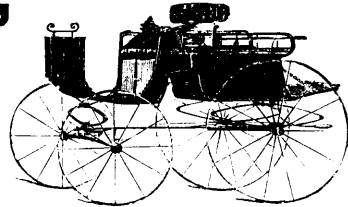
NEW YORK,

CHICAGO,

BALTIMORE,

DETROIT.

PHYSICIANS' Phaetons Stanhopes

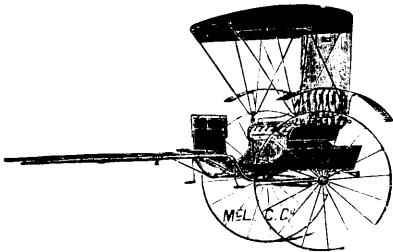


ABERDEEN

And a Special Physician's Phaeton and Cart.

Open and Top Buggies

Now on Hand.



ORIOLE

MANUFACTURED from the very best selected stock, and upholstered in West of England cloth or hand buffed leather to suit the purchaser. A visit to my warerooms would convince the profession as to the value of my stock. Cheapness and durability guaranteed.

The McLaughlin Carriage a Specialty.

J. H. KENNEDY CARRIAGE WAREROOMS

567 Queen Street West, Toronto, Can.

A SCIENTIFIC STUDY OF

Climate Cure

Demands an accurate knowledge of altitude, humidity, air currents, accommodations for invalids and general surroundings.

To get at the facts for yourself take a trip to **DENVER**, Colorado, on the occasion of the Annual Meeting of the

American Medical Association, June 7-12, 1898

and carefully investigate what Colorado has to offer the health-seeker. The most comfortable way to get there is over the

Santa Fe Route

(The Atchison, Topeka & Santa Fe Ry.)

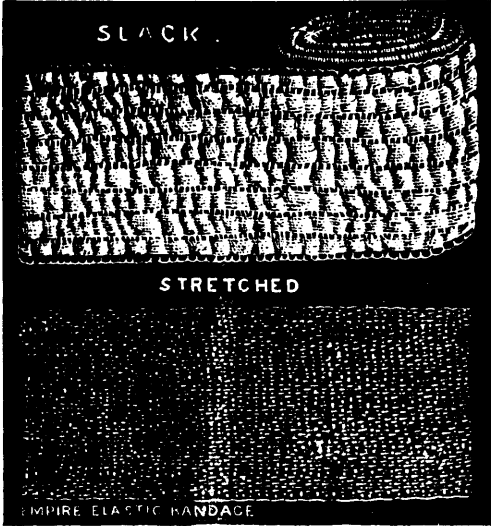
from Chicago, Kansas City and intermediate points. Our trains to Denver pass through Pueblo and Colorado Springs, affording a daylight view of the giants of the Rocky Mountains, including Pike's Peak.

Rate of one fare for round-trip, plus \$2.00 to Denver and back. Tickets may be purchased going one route and returning another. Stopovers in Colorado; also at Kansas City and Omaha. Leave Colorado, returning as late as July 6th.

Apply to any ticket agent of the Atchison, Topeka & Santa Fe Railway, or address the undersigned.

W. J. BLACK, G.P.A.,
TOPEKA, KAS.

C. A. HIGGINS, A.G.P.A.,
CHICAGO.



The Empire Elastic Bandage

SPECIALLY ADAPTED FOR VARICOSE VEINS.

We invite the attention of the Medical and Surgical Profession to the various merits combined in our Bandages: 1st. ITS POROSITY—the greatest in the "Empire." It never causes itching, rash, or ulceration under the bandage.

2nd. ITS ELASTICITY, which will enable the surgeon or nurse to put it on at any required tension, and which will follow a swelling up and down, as the case may be, a feature unknown to any other bandage.

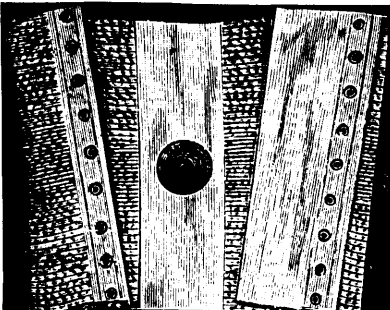
3rd. ITS ABSORBENT PROPERTIES—greatest in the "Empire."

4th. ITS EASY APPLICATION to any part of the body, not being necessary to fold over as with other bandages, as it follows itself with equal uniformity around any part of the abdomen.

5th. ITS SELF-HOLDING QUALITIES. No bother with pins, needle or thread, or string, so tiresome to surgeons, as simply tucking the end under the last fold insures its permanent stay until its removal for purposes of cleanliness.

6th. The only Bandage that is SUPERIOR TO THE ELASTIC STOCKING for varicose veins.

Send \$1.00 for 3 in. by 5 yds. Bandage on approval.



EMPIRE UMBILICAL TRUSS

As an Abdominal Supporter with Button inserted at the Navel.

Is made of the same material, and possesses the same merits as the Empire Elastic Bandage and Abdominal Supporters, and is pronounced by all who have seen it to be the BEST IN THE WORLD. All of our goods are sent free by mail upon receipt of price, and money refunded if not satisfactory.

Infants, \$1.25. Children, \$2.50. Adults, \$4.00.

THE EMPIRE ABDOMINAL SUPPORTER

Is superior to all others for the following reasons : : :

1st. It adapts itself to every movement of the body, giving strong and even support.

2nd. It produces warmth without irritation or sweating, as it is perfectly ventilated.

3rd. In pregnancy, corpulency, tumors, or other cases of enlargement of abdomen, it supports weight of body from the backbone, relieving the sinews of their overwork.

4th. Its easy appliance (lace and drawn on over head or feet).

5th. It is cheap; durable. It can be washed when soiled, proper care being taken to cleanse it in lukewarm water and dry in the shade.

In ordering give the measure of the abdomen.

PRICES :

Six inches wide.....	\$2 00
Eight inches wide.....	2 50
Eleven inches wide.....	3 00
Twelve inches wide (double rubber).....	4 00

Manufactured by

The Empire Manufacturing Co.

43 SPRING STREET,

LOCKPORT, N. Y., U. S. A.



Everett House

UNION SQUARE,
NEW YORK CITY

Most centrally situated—charming exposure overlooking Union Square Park.

A Hotel of established reputation, enjoying a patronage of the highest class who appreciate comfort, completeness of detail and individual attention.

European plan. Popular prices.

B. L. M. BATES, Prop.

. . ANALYSIS . .

Ch. Sodium, 112.50; Ch. Potassium, .31;
Ch. Calcium, 2.87; Ch. Magnesium, 10.34;
Br. Magnesium, .24; Iod. Magnesium, .02;
Carb. Magnesium, 8.63; Carb. Lime, 1.26;
Silica, .22; Carbonic Acid, 5.01. Total, 151.40
in 10,000 parts.

The Carbonated . . .

DUNCAN WATER

Of Caledonia Springs,
Ont.

Pleasant to drink; one bottle a dose;
the perfect natural aperient. Any dealer
can supply it, or address Proprietors,

CALEDONIA SPRINGS,
OTTAWA, ONT.

UNIVERSITY OF BUFFALO.

MEDICAL DEPARTMENT.

The Fifty-Second Regular Session Commences September 13th, 1897

AND CONTINUES THIRTY WEEKS.

The lectures will be held in the large, new, three story building, containing three amphitheatres, and rooms for dispensary patients. Chemical, Pathological, Histological, and Pharmaceutical Laboratories thoroughly equipped with modern conveniences. Instruction by Lectures, Recitations, Laboratory work, and Clinics. Four years' graded course. Clinical advantages unexcelled.

For further particulars and Announcement, address

DR. JOHN PARMENTER, Secretary,

University of Buffalo, BUFFALO, N.Y.

CANADIAN MEDICAL PRACTICE OFFICE.

If You Want To **BUY**
OR **SELL** A Medical Practice

SEND FOR OUR PLAN, ENCLOSING STAMP - - ALWAYS ABOUT 20 TO CHOOSE FROM

See Saturday's "Globe" each week under "Business Chances" for interim offers.

DR. HAMILL, 88 Yonge Street, TORONTO



THE ARLINGTON,

Toronto's Favorite Hotel. Under entirely new and liberal management. Newly furnished and decorated. Its bright rooms render this the most comfortable hotel in Toronto. Rates, \$2.00 to \$3.00 per day.

C. J. BEACHAM, Manager.

Medical Men can recommend them

DR. JIM  

Best 5c. Cigar on the
Canadian Market

Made from pure, wholesome tobacco.
Only the highest grade of leaf used.
Equal to the ordinary 10-cent cigar.

CECIL 
RHODES

A
10c.
Cigar

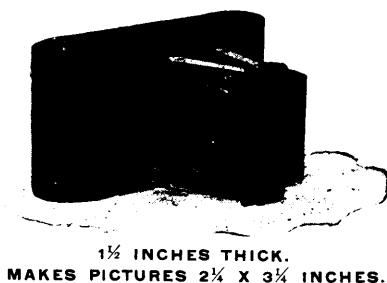
Unsurpassed in flavor and excellence.
Made from the finest grade of Havana
leaf. Imported specially.

The Druggists make a specialty of these brands

THE CANADIAN CIGAR CO.

Toronto, Ontario

Folding



1½ INCHES THICK.
MAKES PICTURES 2¼ X 3¼ INCHES.

Pocket Kodak

So shaped as to go into the pocket without inconvenience, so light as to be no trouble when there, using light-proof film cartridges with which it can be loaded in daylight and withal capable of making beautiful pictures 2¼ x 3¼ inches, the Folding Pocket Kodak is the embodiment of photographic daintiness and utility.

The shape of the picture is artistic and the quality perfect, because the lenses are perfect. These lenses have a fixed focus, are strictly achromatic, have wonderful depth and definition, and every one must undergo the most rigid tests by our own inspector. Every lens with the slightest imperfection is unhesitatingly discarded.



PUT A KODAK
IN YOUR POCKET

The shutter is a marvel of simplicity. It is always set, and snap shots are made by a simple downward pressure on the exposure lever; time exposures are made by touching another lever once to open and again to close the shutter. The shutter has a set of three stops and there are two finders one for vertical and one for horizontal exposures.

Made of Aluminum, covered with fine black morocco with buffed brass fittings.

Price, Folding Pocket Kodak with fine achromatic lens, \$10.00
Light-Proof Film Cartridge, 12 exposures, 2¼ x 3¼40

Kodaks, \$5.00 to \$25.00.

Catalogues free at agencies or by mail.

No Camera is a Kodak
unless manufactured by
the Eastman Kodak Co.

EASTMAN KODAK CO.
Rochester, N.Y.

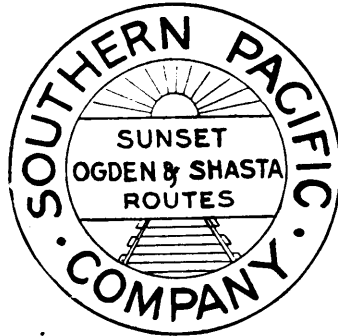
CALIFORNIA, ARIZONA, NEW MEXICO
AND OREGON.

The **Southern Pacific**
Company

OFFERS THE
CHOICE OF



THREE
ROUTES



Via
CHICAGO
or
CINCINNATI

First-class Pullman and Tourist Sleeping Cars by either route.
Best First and Second Class Service to

LOS ANGELES, SAN FRANCISCO

AND POINTS IN

LOUISIANA, TEXAS, ARIZONA

AND NEW MEXICO

For maps, time tables and further information pertaining to rates,
route and service, apply to

W. G. NEIMYER, G.W.A.,
Chicago, Ill.

W. J. BERG, T.P.A.,
Room 220 Ellicott Sq., Buffalo, N.Y.

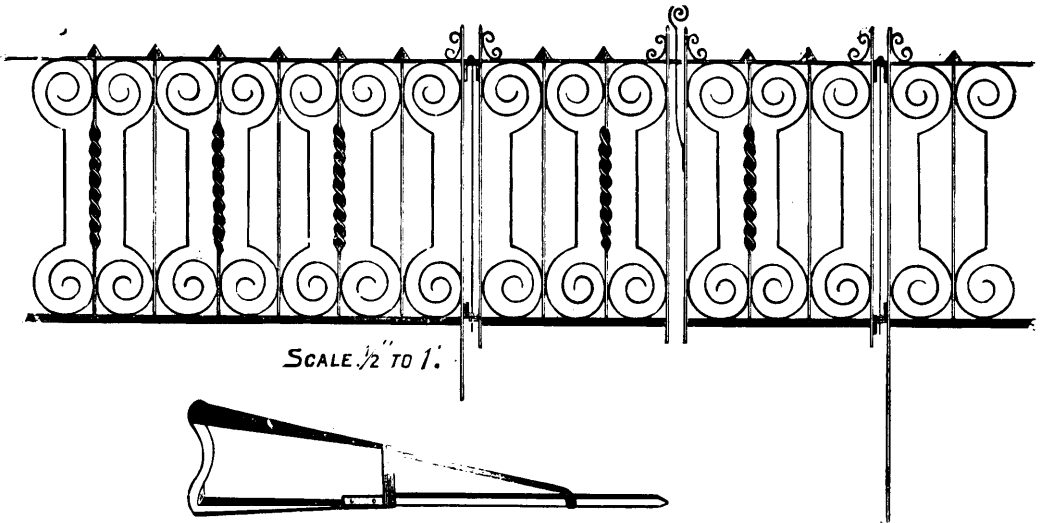
S. F. B. MORSE, G.P.A.,
New Orleans, La.

E. HAWLEY, A.G.T.M.,
343 Broadway, New York.

SHIPWAY



Iron and Bell Works



Electric Light Wiring
Bell Hangers **Wire Work**
Fire Escapes
Locksmiths **Speaking Tubes**
Iron Work

SPECIAL ATTENTION GIVEN TO DOCTORS' WORK



33 and 35 RICHMOND STREET EAST

TELEPHONE
2858



TORONTO



If you will prescribe
**PABST MALT
EXTRACT** for some
weak and exhausted nurs-
ing mother, you will be sur-
prised at her quick up-building.

**SUPREME
AWARD
WORLD'S
FAIR**

The Best
Tonic

PABST MALT EXTRACT



PHYSICIANS who desire that their patients should use some form of Hamamelis, or Witch Hazel, can be sure of obtaining a preparation which is unvarying in its strength and always to be relied upon for its efficacy and purity by specifying **POND'S EXTRACT** in their prescriptions. This precaution is necessary because of inferior preparations of witch hazel, frequently recommended by druggists as just as good as POND'S EXTRACT.

POND'S EXTRACT is indicated for **pains, bruises, sprains** and many troubles of an **inflammatory** character in which a soothing and healing lotion is desirable. It has also very valuable properties as a **styptic** and **astringent**, and is, therefore, especially useful in checking **hæmorrhage**. It is besides **antiseptic**, entirely without danger from poisonous effects, and can be used in any quantity without fear of harmful results. It is scientifically prepared and always uniform.

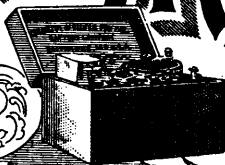
It is, therefore, recommended to the medical profession as a safe and useful preparation. *A bottle will be sent free to any physician on application.*

Prepared only by **POND'S EXTRACT COMPANY,**
76 Fifth Avenue, New York.

Trade Mark on every Wrapper.

STAND ON THEIR MERITS

CHLORIDE OF SILVER DRY CELL BATTERIES



IF INTERESTED
SEND 5¢ IN STAMPS FOR
NO. 8 ILLUSTRATED CATALOGUE
THE HANDSOMEST AND MOST
COMPREHENSIVE EVER ISSUED

The Chloride of Silver Dry Cell Battery Co.
BALTIMORE, MD. U.S.A.



VICHY — CELESTINS

Property French Republic

Bottled under the direct supervision of the FRENCH GOVERNMENT.
Not equalled in the world for medicinal use.

Known for many centuries as the BEST and STRONGEST Natural
Alkaline Waters.

Promote more active endosmose, neu-
tralize and wash out of the system all in-
completely burnt bodies.

To give the name of Vichy water to a
mere solution of bicarbonate of soda is as
great an abuse of language as to give the
name of wine to a mixture of cream of tartar, alcohol, and mineral salts
which wine furnishes when analysed.

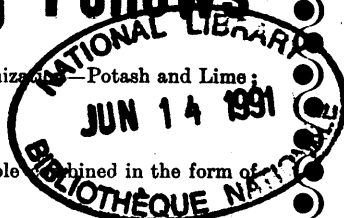
Drink from the **natural spring**, says Sir Henry Thomson, F.R.C.S.,
London.

TO AVOID DISAPPOINTMENT, PLEASE SPECIFY THE NAME CÉLESTINS.

General Agency, 220 Broadway, New York.

None Genuine
in Bulk or
Syphons.

Syr. Hypophos. Co., Fellows



Contains the Essential Elements of the Animal Organization—Potash and Lime;

The Oxidizing Agents—Iron and Manganese;

The Tonics—Quinine and Strychnine;

And the Vitalizing Constituent—Phosphorus; the whole combined in the form of a Syrup with a Slightly Alkaline Reaction.

It Differs in its Effects from all Analogous Preparations; and it possesses the important properties of being pleasant to the taste, easily borne by the stomach, and harmless under prolonged use.

It has Gained a Wide Reputation, particularly in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis and other affections of the respiratory organs.

It has also been employed with much success in various nervous and debilitating diseases.

Its Curative Power is largely attributable to its stimulant, tonic and nutritive properties, by means of which the energy of the system is recruited.

Its Action is Prompt; it stimulates the appetite and the digestion, it promotes assimilation and it enters directly into the circulation with the food products.

The prescribed dose produces a feeling of buoyancy and removes depression and melancholy; hence the preparation is of great value in the treatment of mental and nervous affections. From the fact, also, that it exerts a double tonic influence, and induces a healthy flow of the secretions, its use is indicated in a wide range of diseases.

NOTICE—CAUTION.

The success of Fellows' Syrup of Hypophosphites has tempted certain persons to offer imitations of it for sale. Mr. Fellows, who has examined samples of several of these, finds that no two of them are identical, and that all of them differ from the original in composition, in freedom from acid reaction, in susceptibility to the effects of oxygen when exposed to light or heat, in the property of retaining the strychnine in solution, and in the medicinal effects.

As these cheap and inefficient substitutes are frequently dispensed instead of the genuine preparation, physicians are earnestly requested, when prescribing the Syrup, to write "Syr. Hypophos., Fellows."

As a further precaution, it is advisable that the Syrup should be ordered in the original bottles; the distinguishing marks which the bottles (and the wrappers surrounding them) bear, can then be examined, and the genuineness—or otherwise—of the contents thereby proved.

Medical Letters may be addressed to—

MR. FELLOWS, 48 Vesey Street, NEW YORK.

When writing advertisers, please mention THE CANADIAN JOURNAL OF MEDICINE AND SURGERY.

Smith, Dr. G. B.
25 Elm St.