



If there is Anything in Rubber . . .

that you want but cannot procure through your local druggist or instrument dealer, write us. We make many articles that are not catalogued, and give careful attention to the manufacture of special articles in rubber.

SOME OF OUR SPECIALTIES

Operating Pads and Aprons,

Invalid Rings and Bed Pans,

Air and Water Bed

Urinals and Catheters.

ALPHA RUBBER CO., LTD.

An Illustrated Catalogue sent on application.

. . . . MONTREAL

A Superior Antiseptic Dressing for Wounds.

SANTA BARBARA, CAL., NOV. 27TH, 1894.

POND'S EXTRACT CO. :

Gentlemen:—I have been using Pond's Extract in my practice for twenty years and I frequently have the experience you mention in the *Therapeutic Gazette* of druggists insisting that they can put up as good as yours. Well, I don't believe it and I want you to send me a bottle so I can test it to my own satisfaction. I use it almost entirely as an antiseptic dressing in all kinds of wounds. I combine it as follows :

R.—Pond's Extract - - - - - ℥iv.
 Glycerine - - - - - ℥ii.
 Acid carbolic - - - - - gr. xii. Misc.

Sig.—Use it with absorbent cotton on any wound that you can get at and it makes the cleanest, most soothing and most effective cicatrisant I ever used, and I have had a great deal of railroad surgery and in the army and mining camps. I think it far superior to Listerine or any antiseptic known. You get the antiseptic effect from the Pond's Extract and Carbolic Acid and the affinity glycerine has for water relieves all inflammation, suppuration and pain. After saturating absorbent cotton with the mixture and carefully applying to the wound you exclude the air entirely and almost hermetically seal the wound. Get some of your medical friends to try this. Pond's Extract is very good in second stage of gonorrhœa as an injection.

Respectfully,
 F. G. FLOURNOY, M.D.

PANOPEPTON as a nutrient in surgical operations.

PATIENT, MALE, AGE 61 YEARS.

“Collapse following operation for strangulated hernia. For
 “three weeks following the operation, there was complete
 “collapse, the man knowing nothing for fifteen days. Under
 “the care of two skilled nurses, Mr. B. was bathed every two
 “hours with alcohol and for *sole* nutriment for three weeks
 “took Panopepton in tablespoonful doses. Most of the
 “time every hour and the rest of the time every two hours.
 “Recovery was excellent and the patient is now at his usual
 “occupation as Principal of Schools.”

JULY 24TH, 1896.

PANOPEPTON

Bread and Beef Peptone
 made by

FAIRCHILD BROS. & FOSTER,
 NEW YORK.

BLAUD'S PILL CAPSULES

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

In boxes of two doz.
and one hundred

BLAUD'S PILL with ARSENIC

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

PREPARED BY.....

Duncan, Flockhart & Co.,
EDINBURGH

Agent in Canada

MR. R. L. GIBSON 88 Wellington St. West TORONTO

Samples free on application.

CONTENTS.

Original Articles—	PAGE	Special Selections (Continued)—	PAGE
Osteosarcoma. By C. R. Charteris, M.D., Chatham, Ont.	121	Cocainization. - Practical Treatment for Typhoid Fever. - Cholagogues. - After-pains. . .	161
Colles' Fracture. By Dr. C. M. Stockwell.	123	Necessity of Strict Dieting in Skin Diseases. . .	162
British Medical Association Column	132	Cancer and High Feeding. - Injections of Iodine in Surgical Tuberculosis.	162
Reports of Societies—		Dispensing Calomel with Sugar of Milk. - The Treatment of Scabetic by Compression. - The Use of Diphtheria Antitoxin.	163
Chatham Medical and Surgical Society.	133	Lathyrism. - Mycosis of the Conjunctiva.	164
Special Selections—		The Physician's Library—	
Woman and the Bicycle.	134	Twentieth Century Practice. An International Encyclopedia of Modern Medical Science. . .	164
Venesection. By C. W. Berntheizel, M.D., Columbia, Pa.	136	Editorial—	
Notes on the Treatment of Diphtheria.	138	Substitution.	165
On Interprovincial Registration.	139	The Militia Medical Service.	166
Fresh Air Cure for Consumptive Children.	141	Pharmacy in Germany. - Pork Packers' Peppin. . .	167
The Battle of the Clubs.	143	For and Against the Bicycle.	168
The Prevention of Tuberculosis.	145	Publisher's List—	
Social Purity and Marriage. By E. S. Bullock, M.D., New York.	146	Hemoptysis.	169
X-Ray Method of Examining the Heart.	147	The Untoward Effect of Substitutes. - Sayne in the Treatment of Vegetations of the Vulva. . .	166
Certain Features in the Prognosis of Pneumonia. The New Treatment for Sprained Ankles.	148	The Phonendoscope.	112
Case of Tetanus Treated with Antitetanic Serum - Recovery. - Chemistry of the Respiration in Diagnosis and Therapeutics.	150	Congenital Anonychia. - Nutritive Value of Corn Meal.	170
Therapeutic Nihilism.	151	Pop-Corn Tea. - Sanitary Regulations of Hungary.	172
Pharyngeal Cough in Children.	152	Paradoxical Action of Lavage of the Blood.	174
Etiology of Alimentary Glycosuria and Diabetes. Rigors in Children. - Lithia Water.	153	Obstetrical Treatment of Puerperal Eclampsia. . .	176
Acroparesthesia.	154	Pat's Criticism.	178
Preliminary Note on Blennostasin. - Tetany following Scarlatina.	156	The Action of Thyreiodine in Obesity. - Inhalations in Phthisis.	180
Insufficiency of the Bacteriological Diagnosis of Diphtheria. - Radical Cure of Hernia.	157	The Alcoholic Treatment of Carcinoma. - Ringworm of the Body.	182
Treatment of Eclampsia.	158	Chloride of Morphine and Potassic Cyanide.	184
Eucaïne as a Substitute for Cocaine. - A Plausible Deduction. - Temperature as an Element in Prognosis.	159	Puritis of the Vulva.	186
Emetics. - Gonococcus and Meningococcus.	160	Antiasmatic. - How to Take Care of the Eyes. Ringworm of the Scalp.	188



G. R. RENFREW & CO.

Furriers to Her Majesty The Queen

Carry a complete stock of

FURS AND HATS

OOOO

LADIES' SEAL SKIN JACKETS

and Fur-Lined Garments a specialty

OOOO

LADIES' FURS Repaired and Remodelled into the Latest Styles

OOOO

5 KING STREET EAST - TORONTO

35-37 Buade Street, Quebec

Publishers' Department.

LIST OF ADVERTISERS.

	PAGE		PAGE
Antikamnia Co.	103	Jackson Sanatorium	173
Authors & Cox	113	Jones & Moore Electric Co.	183
Aikenhead Hardware Co.	103	Keen, Robinson & Co.	104
Alpha Rubber Co.	97	Kent, B. & H. B.	109
Alma Sanitarium	102	Kennedy, S. H.	190
A., T. and Sante Fe Railroad	171	Lambert Pharmaceutical Co.	120
Bausch & Lomb Optical Co.	110	Leeming, Miles & Co.	118
Bennett & Wright Co.	189	Lakehurst Sanitarium	176
Bromo Chemical Co.	117	Lyman Sons & Co.	114
Buffalo University	181	Maedonald, A.	189
Benger & Co.	109	Manufacturers Guarantee and Accident Co.	170
Brown & Hussey	113	Moor, J. C.	170
Blachford, H. & C.	176	McGill University, Montreal	105
Colt, J. B., & Co.	181	McKesson & Robbins	Outside back cover
Columbia Phonograph Co.	183	Mullin & Muir	190
Carle, John, & Sons	119	Mulford, H. K., & Co.	112
Confederation Life Association	101	Nassau Health Resort	117
Cumming, W.	179	New York Condensed Milk Co.	193
Columbus Phaeton Co.	188	New York Polyclinic	181
Cincinnati, Hamilton & Dayton Ry	100	New York Pharmaceutical Co.	Inside front cover
Detroit College of Medicine	171	New York Post Graduate Medical School	174
Duncan, Flockhart & Co.	Inside front cover, 98	Od Chem. Co.	119
Dietz, R. E., & Co.	178	Ontario Vaccine Farm	184
Dean, Alf. E.	182	Ontario Grape Growing Co.	179
Douglas, J. M., & Co.	116	Parke, Davis & Co.	Front cover
Empire Manufacturing Co.	187	Pond's Extract	97
Evans and Sons	108	Pickering, Mrs. F. L.	106
Elliott Illustrating Co.	189	Renfrew, G. R., & Co.	99
Everett House, New York	113	Riley Bros., New York	111
Excelsior Springs	185	Robinson, R.	180
Farwell & Rhines	188	Rush Medical College	192
Fell, I. C., & Co.	101	Scott & Bowne	109
Fellows' Hypophosphites	Inside back cover	Stearns, F., & Co.	191
Fairchild Bros. & Foster	98	Spalding, A. G., & Bros.	179
Fletcher, R. A.	178	Sutherland, J. A.	188
Gormully & Jeffery Mfg. Co.	189	Toronto Nursing Home and Cottage Hospital	107
Gurd, Chas., & Co.	188	Toronto Salt Works	179
Geneva Mineral Water Co.	179	Wampole, H. K., & Co.	109
Globe Manufacturing Co.	192	Wabash Railroad	191
Hamill, Dr. W. E.	115	Wheeler, T. B.	189
Homewood Retreat	172	Warner, Wm. R., & Co.	Red insert
Howard, A. H.	186	Walter's Sanitarium	175
Hotel Chamberlin	177	Western Pennsylvania Medical College	171
		Williams Mfg. Co.	186
		Woolrich & Co.	

WHY give the nauseous fat of cod livers when the alterative principles of the oil can be isolated and administered separately?

DOES it seem right to subject the patient to the disagreeable associations of cod liver oil administration when better results can be obtained from the active principles?

COD LIVER OIL is admittedly a valuable medicine. It differs in effect from all other fats, animal or vegetable. Lard oil, olive oil, whale oil, or any other oil, will not

ACT like Cod Liver Oil. Cod Liver Oil is an alterative, No other fat has an alterative effect.

AS Cod Liver Oil produces effects differing from all other fats, does it not seem reasonable to suppose that it contains something that can not be found in other fats? Not until the celebrated French chemists, MM. Gautier and Mourgues, found a process for properly analyzing it were the alterative principles discovered. Cod Liver Oil acts as

AN alterative because it contains certain leucomains and basic principles manufactured in the body of the living fish, and dissolved in the oil during its preparation. These principles when given alone (separated from the fat) are preferable, because the fatty matter is not only disgusting to the patient, but impedes the alterative action by hindering cell activity. Stearns' Wine of Cod Liver Oil contains the active principles with the fatty matter left out. It is not only a valuable

ALTERATIVE but a stimulant to the appetite and digestion, and by its peculiar power in accelerating the activity of cell life, it greatly aids in the elimination of poisonous matter from the system, and in the process of tissue building.

SEND FOR LITERATURE

FREDERICK STEARNS & CO.

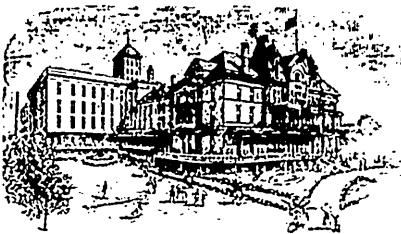
Manufacturing Pharmacists

Detroit, Mich.
London, Eng.
New York City.

WINDSOR, ONTARIO

ELECTRICITY ADOPTED BY THE C. H. & D. RAILWAY FOR SUBURBAN TRAINS.—The management of the C. H. & D. Railway, recognizing that the public demand low rates and trains at shorter intervals for their suburban business than is practical with the present motive power and heavy equipment, have decided to adopt a lighter equipment for the handling of this short local business, in some of its most densely populated territory, by calling to its aid electricity, and a deal was consummated in this city, yesterday, by which the Cincinnati, Hamilton and Dayton Railway becomes the owner, by purchase, of the street railway lines of Middletown, Ohio. The C. H. & D. Railway Company assumes control at once, and will make immediate connection between the street car tracks and the railway. Through cars will be operated from all parts of the city of Middletown to Hamilton, with electricity as the motive power. The

most modern equipment, motors and cars will be put on this line in a short time, and a very low schedule of fares will be adopted, and every effort put forth to give the travelling public an electric service which can not be excelled anywhere in this country. In a short time the electric service will be extended south of Hamilton to Cincinnati, thus revolutionizing its suburban business, which is the heaviest any line has running out of Cincinnati. The C. H. & D. Railway have in view, in this connection, the building up of the suburban villages stretching along the Mill Creek valley. The action of the Cincinnati, Hamilton & Dayton Railway in this matter, which insures an electric service between Cincinnati, Hamilton and Middletown far superior to any which can be afforded by a line built exclusively for that purpose because of the fact that this railroad has a much more solid and smooth roadbed than could be built for the exclusive use of an



THE

ALMA

Alma, Michigan.

A SOLID BRICK BUILDING.
OPEN ALL THE YEAR.

AN institution where the SICK can have the most comforts, the most healthful and enjoyable pleasure, the most skilful medical attendance, and the benefits of *Alma-Bromo*, the strongest Bromide Mineral Water known. A positive remedial agent for relief of Rheumatism, Skin, Kidney and Nervous Diseases.

Luxurious Accommodations.
Beautiful book sent free.

Cases of insanity, infectious diseases and consumption are not received.

EXCELLENT THERAPEUTIC COMBINATIONS

Antikamnia and Codeine Tablets

4½ Gr. Antikamnia, ¼ Gr. Sulph. Codeine.

We meet with many cases in practice suffering intensely from pain, where from an idiosyncrasy or some other reason it is not advisable to give morphine or opium by the mouth, or morphine hypodermically, but frequently these very cases take kindly to codeine, and when assisted by antikamnia, its action is all that could be desired.

In the nocturnal pains of syphilis, in the grinding pains which precede and follow labor, and the uterine contractions which often lead to abortion, in the-douloureux, nuchalalgia, cardialgia, gastralgia, hepatalgia, nephralgia and dysmenorrhœa, immediate relief is afforded by the use of this combination, and the relief is not merely temporary and palliative, but in very many cases curative.

In pulmonary diseases this combination is worthy of trial. It is a sedative to the respiratory centers in both acute and chronic disorders of the lungs. Cough, in the vast majority of cases, is promptly and instantly decreased and often entirely suppressed. In diseases of the respiratory organs, pain and cough are the symptoms which especially call for something to relieve; this combination does this, and in addition controls the violent movements accompanying the cough, and which are so distressing.

Antikamnia and Quinine Tablets

2¼ Gr. Antikamnia, 2¼ Gr. Sulph. Quinine.

In the exhibition of quinine, the antikamnia overcomes the headache and general disturbance so frequently produced, and in fact the conditions for which quinine is given frequently include headache, backache and aching of the limbs, and the antikamnia being sedative in its character relieves this

Antikamnia and Salol Tablets

2¼ Gr. Antikamnia, 2¼ Gr. Salol

The value of the salicylates has long been recognized in the varied forms of rheumatic troubles. Salol is salicylic acid and carbolic acid in combination, and is the most approved form of exhibition.

In combination with antikamnia the excellence of both is maintained, whether the results sought are, the relief of pain or the internal antiseptic effect.

Antikamnia, Quinine and Salol Tablets

2 Gr. Antikamnia, 2 Gr. Sulph. Quinine, 1 Gr. Salol.

This combination has been so successfully exhibited in many disorders, where each and all are indicated, that the manufacturers have been induced to prepare it in tablet form for purposes of general supply. The profession will readily recognize that no new therapeutical claim is made hereby; but that the making of these tablets is simply to offer in an acceptable and convenient form, the means of exhibiting a combination already well approved.

On receipt of professional card The Antikamnia Chemical Company, St. Louis, Mo., will be pleased to send, free of charge, samples of each of these valuable combination tablets, also full literature pertaining to the same.

In Pneumonia, where there is restlessness

R Antikamnia (Genuine)..... 5 ll
Syrup Doveri..... 3 ll
Tinct. Digitalis..... 5 lss
Teaspoonful every 3 to 6 hours.

In Painful Dysmenorrhœa

R Antikamnia (Genuine)..... 1
Brom. Potass..... 1
Elix. Simplex..... 3 ll
M. Sig.—One or two teaspoonfuls every hour in water.—N. Y. Med. Journal.

A NOTABLE FACT.



Many thousands of the finest dairy cows supply milk to the condenseries of the

Gail Borden Eagle Brand

Condensed Milk. They graze in the best dairy sections of America, are allowed only the most wholesome food; therefore, the milk produced is the very best.

Why not use the . . .

Pasteur

Germ-Proof Filter?

It is the best and cheapest considering there is

. . . NO WEAR OUT

OOOO

Easily cleaned. Absolutely germ-proof. Specially adapted to all requirements.

OOOO

We should deem it a pleasure to have the medical fraternity give us a call, or if not convenient please write for particulars to

AIKENHEAD HARDWARE CO.

6 Adelaide St. E. - - - Toronto, Ont.

electric service, will probably result in discouraging the investment of much larger sums of money by the competing lines through territory where there is not business enough for more than one such road.

SANMETTO IN GONORRHŒA.—Dr. A. G. McCormick, Richmond, P.Q., Canada, writing, says: "I prescribed Sanmetto in a recent severe case of gonorrhœa with the greatest satisfaction. I never prescribed any remedy in such cases that acted so well. The case was one of simple gonorrhœa, of a severe type—pain, burning and scalding, with a profuse discharge. By the use of Sanmetto my patient made a rapid and satisfactory recovery. Sanmetto is a sovereign remedy in such cases. I used it two years ago in a like case with a similar result. I am well satisfied that Sanmetto is by far the surest,

speediest and safest, as well as the most pleasant and most satisfactory remedy we have for gonorrhœa."

H.EMOPTYSIS.—Dr. Thos. J. Mays believes that many cases are strongly dominated by the rheumatic spirit, that they belong to the rheumatic class of diseases, and that they must be treated with and promptly yield to antirheumatic remedies. It is really remarkable to see the sudden improvement in many of these cases under the salicylate treatment, and in cases too which previously had resisted all other treatment. He cites a case in which he successfully used

℞ Sodium salicylate ℥ iv.
Potassium acetate ℥ j.
Tincture of digitalis . . . ℥ iij.
Wintergreen-water, sufficient to make. . . . ℥ ℥ iv.

M. Sig.: One teaspoonful four or five times a day.—*Philadelphia P. Lyclinic.*

BABIES



Reared on **Robinson's Patent Barley**, when eight months old, should be fed upon **Robinson's Patent Groats**, with an occasional return to the **Patent Barley**.

Gruel should be made from the **Patent Groats**, and with milk; it then forms a perfect diet, with heat-producers, muscle, bone, and flesh-formers nicely balanced.

• • • •

Manufactured (since 1823) only by

KEEN, ROBINSON & CO., Ltd.

Purveyors to H. M. the Queen.

— **LONDON**

Sold by Grocers and Druggists in 1-lb. and ½-lb. Tins.

POST GRADUATE COURSE

McGILL UNIVERSITY

Montreal

Faculty of Medicine

A Special 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 4th**, and closes about **JUNE 19th, 1897**. It will consist of:

(a) Evening Lectures

Four per week, on the recent advances in Medicine and Surgery by Professors Wm. Osler, Wm. Gardner, Roddick, Stewart, Shepherd, Mills, Bell, Adami, Lafeur Finley, Armstrong, and others.

(Prof. Osler's course will consist of four lectures on Heart Diseases.)

(b) Regular General Clinics

Four per week, on groups of cases in the Medical and Surgical Wards of the Montreal General and Royal Victoria Hospitals. These will be conducted by Professors Stewart, Shepherd, Bell, Blackader, Wilkins, Finley and Lafeur.

(c) Regular Clinics on Special Departments of Medicine and Surgery

In Ophthalmology, Otolaryngology and Gynecology, two per week. In Dermatology, Genito-Urinary Surgery, Orthopedics, Laryngology and Pediatrics, one per week, conducted by Professors Buller, Wm. Gardner, Shepherd, Birkett, Bell, Alloway, and others.

(d) Special Demonstrations

One or more as required, on modern treatment of Diphtheria (Hospital for Infectious Diseases), Polymetry and Aseptic Midwifery (at Maternity Hospital), Mental Diseases (at Verdun Asylum), Medical Legal Autopsy Methods, etc., by Drs. J. C. Cameron, Wyatt, Johnston, Burgess, and others.

(e) Laboratory Courses

For which a small extra fee will be charged to cover the cost of material, will begin in Operative Surgery, Clinical Bacteriology, Clinical Microscopy of Dejecta and Blood, Clinical Chemistry and Post Mortem Methods, by Professors Armstrong, Adami, Ruttan, Martin, Wyatt Johnston, and others.

(f) Laboratory Demonstrations

On the Physiology of the Circulation and the Nervous System, Morbid Anatomy, Medical and Surgical Anatomy, Microscopical Methods, Urinalysis, Serum Therapy, Serum Diagnosis of Typhoid, etc., by Drs. Wesley Mills, Ruttan, Wyatt Johnston, Martin, Elder, Morrow, Gunn, and others.

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.

The Fee for the Course of 24 Lectures Alone (Evening), \$10.

For Any Set of Six Lectures, - - - - - \$5.

Practitioners who purpose attending this Course may obtain time-tables and fuller details on application to

PROF. R. F. RUTTAN, Registrar,

Faculty of Medicine.

THE UNTOWARD EFFECT OF SUBSTITUTES.—A. M. Collins, A.M., M.D., of Shelbyville, Ill., writes, under date of November 2nd, 1896: "I never realized the vast difference between genuine antikamnia and the various substitutes that are being palmed off, until within the past few days; and the realization was all the more pronounced because I myself was the patient. "For four weeks I had been suffering with neuralgia of a very severe type and attended with considerable febrile movement. I tried the various compounds and other preparations, lauded as 'just as good,' but with no real advantage and with no little heart disturbance. On Saturday, I went to Arcola, and while there was taken very sick with one of my neuralgic attacks. I sent to the drug store for some genuine antikamnia, and to be certain about it, procured an unbroken original package. I took it in eight to ten-grain doses at inter-

vals of two hours. The effect was magical. The first dose relieved the severity of the pain, while the second quieted it entirely; and I went to bed, sleeping all night with one awakening of a few moments only, a thing I had not done in four weeks. This experience on my own person has thoroughly convinced me of the superiority of the genuine antikamnia."

SAVINE IN THE TREATMENT OF VEGETATIONS OF THE VULVA.—Dr. Lutaud uses for small vegetations the following formula:

℞ Powdered savine,
Desiccated alum. 25 parts.
Corrosive sublimate, 1 part.—M.

A more active application is the following:

℞ Powdered savine,
Iodoform,
Salicylic acid, 5̄ equal parts.—M.
—*Tri-State Medical Journal.*

"HAPPY RELIEF"

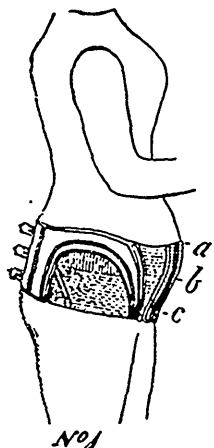
.. Abdominal • Supporter ..

IT HAS NO EQUAL

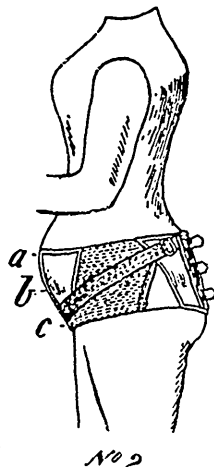
IS PRONOUNCED BY ALL PHYSICIANS who have examined it, and patients who have used it to be the best and most perfect fitting supporter made. It is self-adjusting and affords instant relief. Those who have tried the same report that they would not be without it for many times the cost.

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,

BOX 149,

Brantford, . . . Ontario

THE TORONTO NURSING HOME

AND

COTTAGE HOSPITAL.

27 AND 29 MONAGUE PLACE (facing Homewood Avenue), TORONTO.

RECOGNIZING the demand which exists for some Institution, other than a public hospital, where the advantage of trained nursing can be obtained under the direction of the medical attendant of the patient, it has been decided to establish

THE TORONTO NURSING HOME AND COTTAGE HOSPITAL

under the following regulations :

Patients admitted to the "Home" may be attended by their own doctor, or by the Medical Superintendent of the Institution, as they may desire.

Where patients are treated by their own physician, his directions will be carried out by trained nurses, and the latter will be entirely responsible to the doctor in charge of the patient for the proper performance of his instructions.

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

Massage, etc., may be obtained at the Home without residence if so wished.

Both male and female patients will be received.

The Institution will be made as comfortable and home-like as possible, and is pleasantly situated close to the Horticultural Gardens, and easily reached by the Carlton Street or Belt Line Cars.

Particulars can be obtained from Dr. Lowe, Medical Superintendent, or Miss Dover, Graduate of Toronto Training School, at the "Home."

Medical men and others interested are cordially invited to call and see the Institution.

The charges for Rooms, Nursing, and Medical Attendance, will be \$25.00 per week in advance.

For Rooms, Nursing, etc., without Medical Attendance, the charge will be \$6.00, \$10.00 and \$12.00 in advance.

For Massage, Electrical Treatment, etc., without residence, the fee will be \$1.00 per treatment.

References given when required.

TORONTO, September 4, 1893.

July 15th, 1896.

I HAVE great faith in Imperial Granum when the stomach will tolerate neither medicine nor other food, having just had such a case in my own family.

—M.D., Claverack, N.Y.

Y. L. ABERNATHY, at Tri-State Medical Society, thought there was nothing in serotherapy. The remedies were made to sell. Koch's tuberculin was a failure, but millions were made out of it before this was discovered. Pasteur's hydrophobia and tetanus cures, Hammond's serums, Brown-Sequard's elixir of life, all on a par. They get up wonderful statistics. Lies are divided into three classes, lies, d—n lies, and statistics. Something may develop along these lines as good as vaccination, but it is still in the future. At present they are fads, and very expensive and silly

fads. Think of antitoxin at five dollars per dose. At present rate of serum craze we will ere long have—

An extract of muscle for rheumatic pains,

A gray matter extract to nourish our brains,

An extract of teeth for the fellow who can't chew,

A maxillary extract to cure lock-jaw,

An extract of semen to cure old men,

An extract of clitoris to raise a number ten,

An extract of hymen to preserve a maidenhead,

An essence of vagina, with seashell tints of red,

For the benefit of bachelors, grim and old and gray,

Who can't and won't get married— coz they ain't built that way.—

The American Practitioner and News.



SAVARESSE'S CAPSULES

SANDALWOOD OIL

THEY ARE NOT MADE OF GELATINE

THEY ARE MADE OF MEMBRANE

In consequence of the membranous coating they are

FREE FROM THE OBJECTIONS TO ALL GELATINE CAPSULES.

They do not dissolve until they have passed the stomach, entered the bowel, hence, avoiding all nausea, eructations, and repeating from the stomach. Savaresse's Capsules have been

PRESCRIBED BY THE FACULTY IN ENGLAND FOR 50 YEARS.

Other copies of Testimonials on application

12 College Square East, Belfast, 25th Feb., 1890.

I have prescribed your Savaresse's Capsules of Copaiba, also of Sandal Wood, and find them most satisfactory.

I have given them an extended trial, and am quite pleased in every case with the result. I shall continue to prescribe them for my patients, as they neither disturb the functions of the stomach, bowels or kidneys.

THOMAS BALL, L.R.C.P., L.S.A.

Savaresse's Capsules are undoubtedly the best forms in which the oil can be prescribed. The Capsules do not burst until they have passed out of the stomach, and consequently the nauseous eructations, common to all other methods of administration, are entirely avoided.

J. H. SCOTT, F.R.C.S.I.,

Surgeon to the Adelaide Hospital, Dublin.

One Box Free for a trial on application to

EVANS AND SONS, LTD.,

Wholesale Druggists.

Agents for the Sole Proprietors,
EVANS, LESCHER & WEBB, London.

MONTREAL.

Women Choose the Family Doctor

The Doctor that relieves the women of their functional disorders is the family physician. Asparoline compound has helped many family physicians to relieve their Dysmenorrhœa and Leucorrhœa patients. *We will send enough for one patient, free, to any physician who writes to us at our Toronto branch, 36 and 38 Lombard St., mentioning this journal.*

It is a safe and reliable remedy for the relief and cure of Dysmenorrhœa, Amenorrhœa, Leucorrhœa, Menorrhagia and kindred diseases where the Uterine Organs are involved and no organic lesion exists. The formula shows that it is a strictly vegetable compound, and may be used without any reserve, or any injurious tendencies.

FORMULA :	
Parsley seed	Grs. 30
Black Haw (bark of the root)	" 60
Asparagus seed	" 30
Gum Guaiacum	" 30
Henbane leaves	" 6
Aromatics	"
To each fluid ounce	

Prepared solely by
HENRY K. WAMPOLE & CO.
 Pharmaceutical Chemists,
 PHILADELPHIA, PA.

BENGER'S FOOD

For Infants, Invalids,
 And the Aged

Gold Medal Awarded
HEALTH EXHIBITION, LONDON
 First Class Award
ADELAIDE, 1887, AND MELBOURNE, 1888

The Lancet describes it as "Mr. Benger's admirable preparation."

The London Medical Record says: "It is retained when all other foods are rejected. It is invaluable."

The British Medical Journal says: "Benger's Food has by its excellence established a reputation of its own."

The Illustrated Medical News says:—"Infants do remarkably well on it. There is certainly a great future before it."

BENGER'S FOOD Is Sold in Tins
 by chemists etc.
 everywhere

Wholesale of all wholesale houses

May be obtained of EVANS & SONS, Ltd., Montreal.

KENTS' WATCHES



The standard of excellences — known throughout the province — throughout the Dominion — for their superior time-keeping qualities.

Every watch sold here carries our personal guarantee as to goodness, as to reliability.

SIGN OF THE
 BIG CLOCK

144
 YONGE STREET

KENTS'

Dealers in Watches and Diamonds.

July 3rd, 1896.

I HAVE found Imperial Granum
a most satisfactory food product.

—M.D., Batavia, Ill.

THE DIFFERENCE DEFINED.—
The Bauble publishes the following
verses :

RONDEAU.

"I can't conceive," she archly cried,
"Wherein you men can longer pride
Yourselves from female rivals free,
For surely we have grown to be
Your peers in ev'ry human stride.
It is a truth that none dare hide ;
Yet why you men will not agree
To recognize the new decree,

I can't conceive.

"Now, *entre nous*, won't you confide
And tell me true, all jokes aside,
What difference the world can see
Between your manly self and me?"

"To tell you truly," he replied,

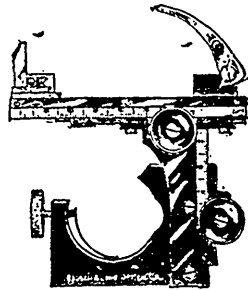
"I can't conceive."

A VAST PILL BUSINESS.—We note
an item among other interesting bits
of news transmitted by the news
gatherers of the daily press, that the
business of a certain patent-pill nos-
trum in New York city was sold to
an English syndicate for \$2,000,000!
The former manager of this pill fac-
tory, we are informed, is to be retained
for five years by the new company at
an annual salary of \$50,000! "*O
dura Messorum ilia.*"

A SURGEON ON THE WAR PATH.
—Lepelletier had occasion recently
to address the graduates of the mili-
tary school of St. Cry, France, and
called upon them "to arise in their
might and as surgeons of the honor
of France, perform *rhinoplasty* upon
the territory of their fatherland, and
restore the flap of living flesh so
brutally severed by the conquering
Germans!"

ATTACHABLE MECHANICAL STAGE

RAPID . . .



ATTACH . . .

.. AND ..

.. IT ..

ACCURATE

YOURSELF

OUR NEW CATALOGUE

Explains It and Describes Upwards of 3,500 Articles
of Laboratory Use.

BAUSCH AND
Rochester, N.Y.

LOMB OPTICAL Co.,
New York City.

RILEY BROTHERS

AND
Bradford, England

16 Beekman St., New York

PRIZE MEDALISTS CHICAGO EXPOSITION

Having branches in Boston, Chicago, Chattanooga, Kansas City, Minneapolis, San Francisco, and at Dunedin, New Zealand, are prepared to prove that they are the

LARGEST LANTERN OUTFITTERS IN THE WORLD

and can therefore supply goods better and cheaper than any other house for the same quality. Their wonderful

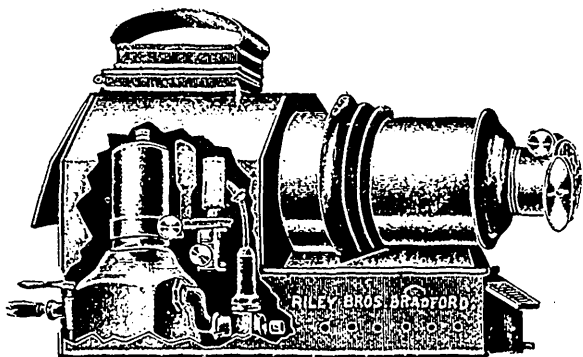
"Praestantia Lantern," oil, at \$40.00

cannot be equalled by any other lantern at the price. Thousands have been sold all over the world, and there is no country in which it is not used. The lanterns can be used with jets of all kinds, the acetylene gas, electric light, or the Lawson "Ether" saturator, which we specially

recommend. It gives a wonderful light, only one gas being required, viz., "Oxygen." Besides this, it is safe, efficient, and cleanly in use, and is a great saving, only using three feet of oxygen gas per hour. A charge of four ounces of methylated ether will run two hours or more.

Price, complete, \$55.00.

The "Monarch" Bi-unial is a fine lantern, and has become justly popular in this country on account of its beauty and excellence of workmanship. When exhibited

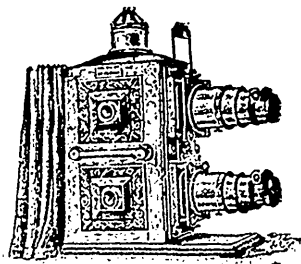


in store windows it always attracts attention; the work done by it upon the screen cannot be excelled; those who want a really high-class instrument should buy the "Monarch." We guarantee it in every respect.

Price, complete, \$196.00.

25,000 to 30,000 slides always in stock in New York at one uniform price of 40 cents, plain; \$1.00, finely colored.

Lantern accessories of all kinds kept in stock, and any American dealer's slides obtained to order at lowest price. We sell on the instalment plan to ministers and institutions. Large stock of scientific subjects—Astronomy, The Heart and How it Beats, Bacteria and kindred subjects. Send for Catalogue, mailed you for 20 cents, abridged lists free, to



16 BEEKMAN STREET

The Trade Supplied

NEW YORK, U.S.A.

THE PHONENDOSCOPE.—Egger (*Munch. med. Woch.*) has made investigations concerning the use of Bianchi's phonendoscope. Bianchi contended that with this stethoscope no vibrations are lost, while the sounds are not exaggerated as by the microphone. The phonendoscope is not only of service in mere auscultation, but the outline of the organs can be mapped out by its help. The author's experience is not so favorable as that of Bianchi. A number of extra sounds are liable to be produced which are troublesome, such as that made by the shaking of the tubes or by the slightest touch of the ebonite plate or metallic case. The heart sounds are heard with greater loudness and over a more extended area than with the ordinary stethoscope, but when only one tube is used the limit is the same for the phonendoscope as for the hollow stethoscope. The increase in the sounds is useful for those who are

deaf, but it is doubtful whether it is of any advantage to those with the ordinary acuteness of hearing. The hearing of the heart sounds over the apices of the lungs is undesirable. Bronchial breathing and some moist sounds are not intensified by the phonendoscope. Sometimes the metallic clang is not transmitted by this instrument. Some overtones are conducted badly or not at all by it. A difference thus exists in the transmission of certain sounds. The author then relates his experiments to show that deep tones are intensified by the phonendoscope, whereas the higher tones are weakened or not heard at all. This explains the disappearance of metallic sounds and the higher tympanitic sounds. Rhonchi are intensified, but consonating *rales* are weakened. By the difference in the number of vibrations the author explains how vesicular breathing is relatively well heard, whereas bronchial breathing is heard



"STANDARD"	No. 1—500 Units (5 cc.)	\$1.00
100 Units to each cc.	No. 2—1000 Units (10 cc.)	1.75
	No. 3—2000 Units (20 cc.)	3.25
"POTENT"	No. 1—500 Units (2 cc.)	\$1.25
250 Units to each cc.	No. 2—1000 Units (4 cc.)	2.25
	No. 3—2000 Units (8 cc.)	4.00
"EXTRA-POTENT"	No. 1—500 Units (1 cc.)	\$1.50
500 Units to each cc.	No. 2—1000 Units (2 cc.)	2.75
	No. 3—2000 Units (4 cc.)	5.00
	Metal Case	
Improved Antitoxin Syringe, No. 1, 10 cc.		\$3.00
	No. 2, 5 cc.	3.00

Proper Dosage, 1000 Units in Ordinary Cases

The First Step

in the treatment of Diphtheria should be the administration of

ANTITOXIN

It "should be administered as early as possible on a clinical diagnosis, not waiting for a bacteriological culture," says the

Report of the American Pediatric Society

The society also recommends "the most concentrated strength of an absolutely reliable preparation."

Mulford's Antitoxin

as stated in the report of the Bacteriologists of the Pennsylvania and Massachusetts State Boards of Health, meets all requirements.

H. K. MULFORD COMPANY
PHILADELPHIA

Chicago: 112 and 114 Dearborn St.

Most Recent Brochure on Antitoxin Treatment Sent Free if You Mention this Journal.

THE BABY'S DIGESTION

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 food is of the right sort there is usually no trouble. A doctor's chief concern is in getting a palatable food that will digest easily. It's easy to get it 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.

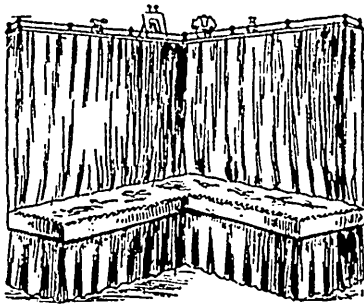
Cosy Corners our Specialty

BROWN & HUSSEY

Practical Upholsterers
Carpet Cleaners
Hair Mattresses Renovated

703 YONGE STREET, - - TORONTO

Telephone 3623



Physicians

When you visit New York this summer be sure and stay at the

EVERETT HOUSE

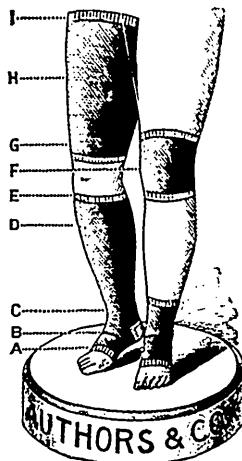
(B. L. M. Bates, Proprietor)

UNION SQUARE,

New York



Strictly first-class at moderate rates. European plan. New plumbing throughout. This hotel is most convenient to the shopping district of New York.



IF ON THE FIRST APPEARANCE of trouble in either the spine, hip or knee joint, or any trouble that can be treated with surgical appliances, the patient were advised to apply to a firm with experience and a reputation for fair, square dealing, it would

be a lasting benefit to the patient, and add to the doctor's success. We have 35 years' experience as manufacturers of surgical appliances, artificial limbs, trusses, etc. Elastic stockings made to order. Crutches, etc.

AUTHORS & COX,

135 Church Street - - TORONTO.

with varying distinctness. Bianchi's contention, that the *timbre* of the sounds is not altered, is incorrect. Moist sounds produced immediately beneath the chest wall may appear metallic, and the author relates experiments to explain this. Thus in auscultation the sounds may be altered in two directions: (1) The metallic clang may be lost; or (2) sounds may appear metallic which are not really so. Murmurs may also be altered in their intensity, being sometimes intensified and sometimes weakened. The phonendoscope may be useful in differentiating murmurs in complicated valvular lesions and in distinguishing between endopericardial and pericardial sounds. The author is sceptical as to whether organs can be correctly mapped out with its assistance. The convenience with which the instrument can be used, and the fact that several people can listen at the same time, are ad-

vantages; but notwithstanding this the author does not think it can replace the ordinary stethoscopes.

A BOOK has recently been issued in England called "The Diary of a Resurrectionist, 1811-1812, to which are added an account of the Resurrection Men in London, and a short history of the passing of the Anatomy Act." *The Hospital*, in commenting upon this book, says: "It is now more than sixty years since the Anatomy Act was passed, and there are probably few who remember, except as a tradition, the horrors of the preceding time, when the medical schools were supplied with subjects for dissection chiefly by men who stole corpses from the grave. These men were called body snatchers, or in a slang phrase, "resurrection men." Respect for the dead made the idea of this violation of the grave horrible to the survivors, and various means

LYMAN SONS & CO.'S SPECIALTIES

Ædeps Lanæ "N. W. K."

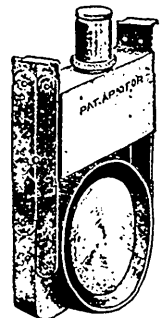
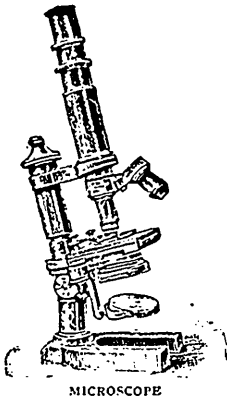
A pure natural Anhydrous Woolfat and perfect Ointment Base. Better and cheaper than any other. Write for sample and pamphlet free.

SURGICAL INSTRUMENTS

Our exhibit of Surgical Specialties at the Medical Convention recently held in Montreal, was highly commended. We have every requisite for the Physician and Surgeon.

MICROSCOPES, BATTERIES, CLINICAL THERMOMETERS, STERILIZERS, Etc.

Also a full line of Hospital Glassware. Write for our large Illustrated Catalogue of Surgical Instruments with supplement.



FOLDING POCKET LARYNGOSCOPE

Lyman Sons & Co.

380 TO 386 ST. PAUL STREET

MONTREAL, P.O.

CANADIAN MEDICAL PRACTICE OFFICE.

Conducted for the Convenience and Protection of the Profession, for the purchase and sale of practices, the arrangement of partnerships, securing eligible openings, etc. All transactions and communications strictly confidential.

PRACTICES FOR SALE.

Intimate by number those you wish details of.

- No. 118.**—Is the fine brick home and practice of \$2,000, in small village of 300, in County of Durham. One opposition. The doctor will rent for five years at low rental. A great opportunity.
- No. 117.**—Is an offer of an old practitioner in town of 1,800, in County of Bruce. Three opposition. Large territory. The practice has formerly been \$3,000 to \$4,000, but at present is much less, the doctor being in poor health. He offers his home at actual market value, and assures us that his successor will certainly secure a large practice. Price, \$3,000. Terms, \$1,000 cash, balance on easy payments.
- No. 116.**—Is a field occupied for the past forty years by medical men; but which is now vacant. Nearest opposition is 4, 7, 8 and 12 miles. Nothing to buy; but simply get there and go to work, where from \$1,500 to \$2,000 can be made first year.
- No. 115.**—Is a practice of \$1,500 with appointments worth \$300 per year in suburb of Toronto of 5,000 population. The doctor offers his good will, three weeks' introduction, and office contents for \$400 cash. All appointments can be transferred.
- No. 114.**—\$3,500 practice and best house in a village of 1,000 population, with only one opposition, in County of Simcoe. One of the most inviting offers we have ever presented. Price, \$3,700. Terms, one-third cash, balance on easy time. This will be taken by first one investigating personally.
- No. 112.**—Is a big practice and fine home in a western Ontario town of 3,000 population. The doctor is an M.P. and is going to move to Ottawa. Price, \$4,000. Terms, half cash.
- No. 110.**—Is an inquiry from an English physician who will pay good bonus for half interest in big practice, with a view of ultimate succession.
- No. 109.**—Is a locum tenens for 4 months in big western practice. Locum takes all he makes and pays the doctor only fair rent for use of house, office and stable outfit. Must be taken before March first.
- No. 105.**—Is a \$3,500 to \$4,000 practice, in town of 3,000 population, which is offered with the doctor's chattels and a month's introduction for \$2,000. Terms, half cash. Only three opposition and an immense field surrounding. Most of the practice is cash. One of the best things we ever offered. The doctor must go south for health.
- No. 104.**—County of Leeds; practice from \$2,000 to \$3,000; population 700, one opposition, established many years; four weeks' introduction, eight roomed house, with good stable and sheds. The whole offer for \$1,700. Terms, \$600 cash, balance on easy time. A great opening for either a Methodist or an Anglican.
- No. 100.**—\$2,000 practice and residence, with office contents, road outfit, household furniture, etc., with full introduction, in a village of 700, in eastern county, without opposition. Price, \$2,000. Terms, half cash. A decided bargain for Methodist.
- No. 97.**—Is a practice and property in village of 800 near Toronto. Finest country and pay, with one weak opposition, which is a great opening for any Methodist physician. He can do from \$1,500 to \$2,500 per year; cash, sure. Price of property only asked, which is \$1,800. Terms, \$250 cash, balance on mortgage. County of York.
- No. 96.**—\$2,000 to \$3,000 practice in village of 300 in County of Leeds, with introduction, road, stable, bed-room and office outfit; one opposition; very long drives; rich country; good pay. Price, \$1,000. Terms, \$500 cash; balance on time.
- No. 94.**—\$2,500 practice and lovely home in County of Bruce; population 2,000 and weak opposition; full introduction. Price \$1,000, which is less than cost of house, \$2,000 cash; balance on time. An inviting opening.
- No. 87.**—Is a big practice in Hamilton which the doctor will hand over to purchaser of his home at really a bargain. Price \$6,000; easy terms.
- No. 75.**—Is one of the choice rural practices in the Province. Fine rich country, and a practice which pays at least \$3,000 cash per year. County of Durham. The doctor's home is very desirable and well worth price asked for all.
- No. 67.**—Is a practice—County of Durham—in its richest part—village of about 300. A nice home and practice of \$2,000 for less than price of house—ill health the cause.

SEND FOR FULL LIST OF PRACTICES.

Physicians intending to sell should place their practices in our hands at as early a date as possible, for spring is general moving time, and many enquiries will present during the next few weeks.

We try to secure reliable openings for physicians and will offer nothing which will not stand a thorough investigation. We obtain from prospective buyers, their age, qualifications, religious persuasion, financial ability, etc., etc., and a pledge as to secrecy and honorable dealings.

Practices offered independently of this office are generally those which we have rejected as unworthy and undesirable.

We court the patronage of the profession and promise honest effort to secure your wishes, which our accumulated experience in these matters ought to enable us to do.

Letters must be direct from medical practitioners interested, and must enclose stamp for reply, otherwise they will remain unnoticed.

Address— **DR. W. E. HAMILL,**

Room 11, Janes Building, N. E. Corner King and Yonge Sts., TORONTO

were devised to secure that the bodies of the beloved dead should remain undisturbed. The iron coffin, instead of the usual wooden one, was so intended. A heavy iron cage, called a "mortsafe," was another. Mortsafes were of various kinds. Some formed almost a house of iron bars, with a locked gate to it. Others lay flat on the grave, and consisted sometimes entirely of iron, and sometimes of a border of strong masonry with iron bars on the top. But such precautions as these could be taken only by rich men. The poor watched the graves of the dead night after night, till they might reasonably suppose that putrefaction had set in and the corpse thus become useless for anatomical purposes. But the body-snatchers were not to be deterred by casual watchers, and the duty of guarding the dead had to be organized as a regular patrol. In vil-

lages parties of men took it in turns to keep armed watch, and fired at any suspicious-looking character who was seen in the churchyard after dark. In the village of Symington, in Lancashire, there may still be seen a tower from whose vantage the villagers kept a look-out for the resurrection men, prepared to shoot the first that appeared. In the cemetery of Crail, in Fifeshire, there is a tower, intended to serve as a receptacle for the bodies until they were too far decayed to be worth stealing. . . . Even when the body was secured the thieves did not always get off safely with their booty. In this connection the present writer is tempted to tell a story current in Ayrshire. Two resurrection men had dug up a body, put it in a sack, and drove away with it in a cart. But on their way home they stopped at a public house. While they were drinking some wag investigated their

DEWAR'S PERTH WHISKY.

OPINIONS OF MEDICAL AND OTHER PAPERS.

The Lancet.—"This is a good, pure and wholesome spirit."

The Scotsman.—"Singularly mellow, thoroughly matured, and of the most delicate flavor."

The Practitioner.—"It has all the marks of a pure and well-matured spirit."

The London Medical Recorder.—"It is an excellent spirit, and we can with confidence recommend it as a choice spirit for medicinal purposes."

Medical Press.—"A well-matured spirit, with a captivating flavor and a bland taste."

The Hospital.—"Well matured, free from fusil oil and exceedingly wholesome."

The Sanitary Record.—"It is an excellent spirit of fine flavor, is free from all deleterious compounds, and can be safely recommended."

The Country Brewers' Gazette.—"Is of the best we have ever tasted."

Perthshire Constitutional.—"Of exceptionally good quality; a long way ahead of any of its rivals."

Scarborough Post.—"Remarkable for aroma, purity and the mellowness which age alone can give."

Eastern Australian and South African Journal of Commerce.—"An exceedingly fine Old Highland Whisky."

The Colonies and India.—"Old, soft and mellow, pleasant to the palate and invigorating to the system."

Appointed by Special Royal Warrant Purveyors to Her Majesty the Queen.

Awarded 50 Gold and Prize Medals.

TO BE HAD EVERYWHERE.

J. M. DOUGLAS & CO., = Agents, = MONTREAL.

BROMO CHLORALUM

NON-POISONOUS, SAFE, ODORLESS.



A Powerful, Concentrated Deodorizer, Disinfectant, Germicide, Saline Antiseptic, Alterative and Styptic.

Arrests and Prevents Putrefaction and Contagion.

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

Employed internally and externally as a remedial agent in the treatment of diseases, and as a deodorizer and disinfectant, is, under all circumstances, absolutely safe.

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

Send for Full Descriptive Pamphlet.

BROMO CHEMICAL CO.

241 & 243 West Broadway
NEW YORK.

NASSAU

The Most Famous
**HEALTH and
PLEASURE RESORT**
in the West Indies

IS NASSAU

It is a less distance from New York than Chicago. It has the most even climate in the world, 68 to 78 deg. in the winter months. It has perfect roads, is the rendezvous of the yachtmen, and justly celebrated for its fishing and cycling facilities.

The Royal Victoria Hotel

A magnificent building, is noted the world over for its cleanliness and cuisine. There are other good Hotels and Boarding Houses within the reach of all. Cable communication with all the world.

Reached in 70 hours by the SUPERB STEAMERS of the

Ward Line

Leaving New York, every other Thursday.

All illustrated matter sent on application.

BAHAMAS

JAMES E. WARD & CO., - 113 WALL STREET, NEW YORK.

baggage, and, finding out its nature, took out the corpse and placed himself in the sack. Presently the thieves came out and drove off. "Man!" exclaimed one presently, "the corpse is moving." "Nonsense," said the other. "But," the first protested, "it's warm." And a sepulchral voice answered from the sack, "Aye, ye sinners, and when ye've been as lang in hell as I have, ye'll be warm, tae." Terrified at the thought that they had got a lost soul, the thieves fled, leaving the horse and cart to the supposed corpse, who took possession of them. Even if the resurrection men afterwards found out their mistake, it would hardly have been wise to reclaim their property."

July 13th, 1896.

IMPERIAL GRANUM gives me great satisfaction.

—M.D., Birdsall, N.Y.

PREVALENCE OF SYPHILIS IN RUSSIA.—A congress for the study of prophylactic measures against syphilis will meet in Russia before long, and preliminary investigations are now being conducted on a large scale. According to the *Annales de Derm. et de Syph.*, this disease is assuming such proportions in that country that in certain regions the number of syphilitic is no longer counted, merely the non-syphilitic.

DRY OR MUMMY PREPARATION.—Bruns recently exhibited a valuable set of limbs, especially adapted for educational purposes, which he had prepared by soaking them in undiluted alcohol for a quarter of a year, and then merely hanging them up in the air to dry for another three months. By renewing the alcohol frequently the length of time they are soaked can be shortened.

DIPHTHERIA ANTITOXINE

Gibier's is put up in vials of 5 c.c., 10 c.c., and 25 c.c., and is the best and safest on the market. We also have all the other Antitoxines and Serums made by the Pasteur Institute of New York.

IMPORTANT: Serum therapy does not interfere with the ordinary treatment.

Canadian Depot:

LEEMING, MILES & CO.,

53 St. Sulpice St.,

MONTREAL.

THE MILK SUPPLY OPEN TO SUSPICION

Tuberculosis in cows is very prevalent. The preparation of infant foods with infected milk is dangerous.

NESTLÉ'S FOOD

meets this emergency, being prepared for use with water only. It furnishes the safest and most nourishing diet for infants obtainable.

Physicians indicating number of samples desired will be cheerfully supplied gratis, by addressing

LEEMING, MILES & CO., - MONTREAL.

A Vitalizing Tonic to the Reproductive System.

SANMETTO

—FOR—

GENITO-URINARY DISEASES.

☞ A Scientific Blending of True Santal and Saw Palmetto-in a Pleasant Aromatic Vehicle.

SPECIALLY VALUABLE IN

Prostatic Troubles of Old Men—Pre-Senility,
Difficult Micturition—Urethral Inflammation.
Ovarian Pains—Irritable Bladder.

POSITIVE MERIT AS A REBUILDER.

DOSE:—One teaspoonful four times a day.

OD CHEM. CO., NEW YORK.

HIGHEST AWARD
WORLD'S FAIR

IMPERIAL GRANUM

HIGHEST AWARDS
WHEREVER EXHIBITED

THIS STANDARD PREPARED

FOOD

"IS WELL-PREPARED! NUTRITIOUS! EASILY DIGESTED!"—The World's Columbian Commission.

SEEMS TO HOLD FIRST PLACE IN THE ESTIMATION OF MEDICAL OBSERVERS.—*"The Feeding of Infants," in the New York Medical Record.*

A good and well made powder of pleasant flavour. CONTAINS NO TRACE OF ANY IMPURITY.—*The Lancet, London, Eng.*

A valuable aid to the physician in the treatment of all the graver forms of gastric and enteric diseases.—*The Prescription.*

As a food for patients recovering from shock attending surgical operations IMPERIAL GRANUM stands pre-eminent.—*The International Journal of Surgery, New York.*

Not only palatable, but very easily assimilated.—*The Trained Nurse, New York.*

IMPERIAL GRANUM is acceptable to the palate and also to the most delicate stomach at all periods of life.—*Annual of the Universal Medical Sciences, Philadelphia, Penna.*

Highly recommended and endorsed by the best medical authorities in this country.—*North American Practitioner, Chicago, Ills.*

It has acquired a high reputation, and is adapted to children as well as adults—in fact, we have used it successfully with children from birth.—*The Post Graduate Journal.*

The results attending its use have been very satisfactory.— * * * *M.D., in New York State Medical Reporter.*

Especially valuable in fevers, and often the only food the stomach will tolerate in many gastric and enteric diseases.—*Dominion Medical Monthly, Toronto.*

★ 'Physician's-samples' sent free, post-paid, to any physician—or as he may direct. ★
JOHN CARLE & SONS, Wholesale Druggists, 153 Water Street, NEW YORK CITY, N. Y.

THE BEST ANTISEPTIC
FOR BOTH INTERNAL AND EXTERNAL USE.
LISTERINE.

Non-Toxic, Non-Irritant, Non-Escharotic—Absolutely Safe, Agreeable and Convenient.

FORMULA.—LISTERINE is the essential antiseptic constituent of Thyme, Eucalyptus, Baptisia, Gualtheria and Mentha Arvensis, in combination. Each fluid drachm also contains two grains of refined and purified Benzo-boracic Acid.
DOSE.—Internally: One teaspoonful three or more times a day (as indicated), either full strength, or diluted, as necessary for varied conditions.

LISTERINE is a well-proven antiseptic agent—an antizymotic—especially useful in the management of catarrhal conditions of the mucous membrane, adapted to internal use and to make and maintain surgical cleanliness—asepsis—in the treatment of all parts of the human body, whether by spray, injection, irrigation, atomization, inhalation, or simple local application, and therefore characterized by its particular adaptability to the field of

PREVENTIVE MEDICINE—INDIVIDUAL PROPHYLAXIS.

LISTERINE destroys promptly all odors emanating from diseased gums and teeth, and will be found of great value when taken internally, in teaspoonful doses, to control the fermentative eruptions of dyspepsia, and to disinfect the mouth, throat and stomach. It is a perfect tooth and mouth wash,
INDISPENSABLE FOR THE DENTAL TOILET.

DISEASES OF THE URIC ACID DIATHESIS.

LAMBERT'S LITHIATED HYDRANGEA.

RENAL ALTERATIVE—ANTI-LITHIC.

FORMULA.—Each fluid drachm of "LITHIATED HYDRANGEA" represents thirty grains FRESH HYDRANGEA and three grains of CHEMICALLY PURE Benzo-Salicylate of Lithia. Prepared by our improved process of osmosis, it is INVARIABLY of DEFINITE and UNIFORM therapeutic strength, and hence can be depended upon in clinical practice.
DOSE.—One or two teaspoonfuls four times a day (preferably between meals.)

Close clinical observation has caused Lambert's Lithiated Hydrangea to be regarded by physicians generally as a very valuable Kidney Alterative and Anti-lithic agent in the treatment of

Urinary Calculus, Gout, Rheumatism, Cystitis, Diabetes, Hæmaturia, Bright's Disease, Albuminuria, and Vesical Irritations Generally.

REALIZING that in many of the diseases in which LAMBERT'S LITHIATED HYDRANGEA has been found to possess great therapeutic value, it is of the highest importance that suitable diet be employed, we have had prepared for the convenience of physicians

DIETETIC NOTES,

suggesting the articles of food to be allowed or prohibited in several of these diseases. A book of these Dietetic Notes, each note perforated and convenient for the physician to detach and distribute to patients, supplied upon request, together with literature fully descriptive of LISTERINE AND LAMBERT'S LITHIATED HYDRANGEA.

LAMBERT PHARMACAL CO., St. Louis, U. S.

British, Canadian, French, Spanish, German and South American Trade Constantly Supplied

THE
Dominion Medical Monthly
... AND ...
Ontario • Medical • Journal

Vol. VIII.

TORONTO, FEBRUARY, 1897.

No. 2

ORIGINAL ARTICLES.

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

OSTEOSARCOMA.

By C. R. CHARTERIS, M.D., Chatham, Ont.

MR. PRESIDENT AND GENTLEMEN,—The subject I have chosen for my paper this evening is "Osteosarcoma," with special reference to a case under my care. Of all malignant diseases I think osteosarcoma is the most malignant, and, so far as I can learn, amenable to nothing in the way of medical treatment, and only the knife has any control over it, and that only temporary. If there is any gentleman present who can suggest any drug which would have any influence in retarding the growth of this disease I shall be deeply indebted to him for such information. The tendency of osteosarcoma, even after its removal by amputation, or other operation, is to recur at longer or shorter intervals, appearing either externally, or attacking some of the internal organs, with always a fatal termination. A return in some of the internal organs would, I think, be far preferable in many ways, chiefly because not so noticeable, and hence great mental relief to the patient. I will not take up your time discussing the different varieties, such as round celled, spindle celled, and mixed sarcoma, but will pass on to the history of my case, which is as follows:—

W. W., aged nineteen years, a twin, family history excellent, at the age of thirteen years was kicked by a horse in the thigh, causing at the time soreness and swelling, which readily subsided. About two years later he complained of some pain in the left leg, about where he was kicked. Not much attention was paid to this at first, being attributed to "growing pains," the boy being evidently in perfect health and not seeming to suffer very much.

*Read before the Chatham Medical and Surgical Society.

This went on for some time, when the pain increased in severity, so much so that he could not sit quiet in school, having to leave before the school was out. It was noticed about this time that he was getting much thinner and increasing in height; then a lump was noticed. His father brought him to my office, when, on examining him, I thought he had been hurt while at play or skating, but in this I was mistaken. I, however, prescribed some soothing liniments, which relieved the pain for a time, still the lump increased in size gradually, and I thought it might be a cold abscess and inserted a hypodermic needle, but could get no fluid nor any signs of pus. I put him on quinine and tonics, as he had been having fever and some slight chills, and painted the lump with iodine, with no improvement either in the condition of the lump or his general health, the lump appearing now to grow much faster, with increased hardness. I now feared some bone lesion, probably sarcomatous, and suggested a consultation, which was readily granted, and in August, 1892, Dr. Bray saw him with me, and, in going over the history of the case, agreed that it was sarcomatous and that amputation was the only recourse, and that at the hip joint. His parents did not wish the leg amputated if it were possible to avoid it, so I consented to temporize and see what further tonic treatment might do, but this only developed the fact that the tumor was growing rapidly and the boy was fast losing flesh and strength. Further advice was sought, and Dr. H. O. Walker, of Detroit, was consulted, who advised immediate amputation at the hip joint, which was done by him in September, Wyeth's method being employed, without the loss of half a cup full of blood, and in seventeen days after the operation he was able to leave the hospital and return to his home, the wound having healed by first intention and without a drop of pus. He stood the operation well and rapidly increased in strength and flesh, and up to a month ago weighed, with his one leg, 165 pounds, his height being six feet, his health during the four years since the operation being excellent, with no sign of a reappearance of the disease until some time in October last, when he noticed a lump on the right side of his head. Just here let me show you some photographs of the condition before operation, the stump after operation, and two longitudinal sections of the tumor.

As mentioned before, he noticed this lump one morning in October last, and remarked to his landlady, when he went down to breakfast, that he must have been fighting with his bed post, as he had a lump on his head. This lump was about the size of a small hen's egg, and noticed there, for the first time, no pain, no soreness preceding nor accompanying it. He consulted a couple of physicians in the town in which he is living who treated it, but said they could not tell him what it was, so on the 15th of December last he came to see me. On examining it, and knowing the previous history of the leg tumor, I advised its removal, but the operation was put off for a week to enable him to get his work, which is that of bookkeeper for a large manufacturing concern, into shape, to leave. On the 21st of December Dr. H. O. Walker, of Detroit, with Drs. Duncan, Bray and myself, removed the tumor. The hair having been previously cut short and the portion over the tumor shaved and carefully washed with a 1 in 2000 bichloride solution and covered with a soap poultice with a bichloride cap, a horseshoe-shaped incision was made around the base of the tumor, the flap reflected, and the tumor carefully removed from the bone, which was thoroughly scraped and chiselled all over. But it was found to be so infiltrated with the growth that it was thought not advisable to remove any portion, as it would be impossible to tell how far we might have to go to get sound bone. The bone under the tumor was fully

hard and not honey-combed to any extent. Spicula of bone were found extending into the tumor, which you will observe on examining the specimen. After thoroughly cleansing out the wound it was closed, a drainage tube being inserted and the whole covered with dry antiseptic dressings. The drainage tube was removed on the second morning after the operation, there being no discharge. He was able to be up on the fourth day and left the hospital one week after the operation. I did not take any measurements of the tumor, but the distance between the two horns of the incision was $3\frac{1}{2}$ inches and from the base to the tip through the centre was 4 inches. Up to the present there is no sign of any return, but I fear before the lapse of three months there will be. The wound has actually healed and there is scarcely any trace of the original incision. This case, gentlemen, proves the "three year limit" is not always to be relied upon, as we have the growth reappearing four years after the first operation. The early diagnosis and subsequent removal of the growth with all the tissues surrounding and for some considerable distance from the growth are essential in all these cases.

COLLES' FRACTURE.*

By DR. C. M. STOCKWELL.

While making no claim to originality of investigation or methods of treatment, so deeply am I impressed with the importance of a correct comprehension of the true character of this lesion and of the unfortunate results that usually follow, that I am led to present a brief synopsis of the literature covering the subject, along with the results of personal experience both in the usually accepted and a later method of treatment.

It will, I doubt not, be conceded that no injury is so frequently met with that to the surgeon gives such unsatisfactory results: this is due in some measure to an incorrect ætiology. In no other fracture is there such marked tendency to stiffness of the joint and infiltration. In fact, it is not a fracture simply, but a combined or rather conjoined fracture and dislocation—a fracture of the lower end of the radius, and dislocation of the ulnar-carpal articulation, with laceration of the investing and connecting ligaments. These last—the lacerations—generally unrecognized, are a source of great irritation and necessarily lead to synovial inflammation, effusion, and lymph deposits, that induce great suffering and ultimately permanent deformity, to say nothing of the many instances in which they give rise to troublesome and unsatisfactory litigation. Text-books not alone fail to impress upon the student these facts, but for the most part sedulously ignore them.

Frank Hastings Hamilton, though he recognizes these possibilities as suggested by other writers, fails to appreciate their true import, and claims such conjoined dislocations and lacerations can only occur in cases that are produced by exceptionally severely applied force, predicating his opinion upon the fact that force, as applied to the cadaver in his experiments, failed to produce any such compound injury. Following Nélaton's suggestion and the actual experiments of Pilcher, he attempted the production of Colles' lesion upon the cadaver, by the following method: Extreme extension of

* Read before the Windsor Medical Association.

the hand upon the arm, with the palm of the hand fixed upon a firm, unyielding surface, when, by severe blows upon the sawn-off upper ends of the radius and ulna, fracture of the former was effected without the complication of dislocation of the latter or tearing of carpal ligaments. Considering Hamilton's boasted familiarity with mechanical laws and their relations to the lines of force, it is indeed amazing that he failed to recognize the vast difference between the terms of this experiment and the actual conditions attending a case of Colles' fracture in the living subject. And when his experiments are compared with those of Edwin M. Moore, or even with those of Lewis Pilcher, they appear still more faulty, revealing an utter lack of knowledge of the mechanic-anatomical relations of not alone the radius and ulna, but also of the wrist and hand. He gratuitously assumes the lesion is the result of the radius being caught between two counter forces and giving way at its weakest point.

In the experiments of Doctor Moore—subsequently verified by Pilcher and Jacobson—the arm of the cadaver was bound flat upon a table-top, its anterior surface downward, and a flat lever fastened to the palm whereby the hand was forcibly extended—that is, bent back upon the arm—until fracture of the radius followed, which result invariably induced displacement of the ulna and tearing of the ligaments, both duly announced by a distinct snap and sudden relief of tension. This experiment in its *modus operandi* is as nearly as possible consonant with the applied force that induces Colles' fracture, and was so recognized by Dupuytren as long ago as 1820. It is a recognition, moreover, of the fact that there is another factor aside from mere force in the line of the shaft of the radius, viz., extension of the hand at the carpo-radial and carpo-ulnar articulation. And here it may be appropriate to remark there is a third prime factor in the production of this lesion, of which no account can be taken in any experiment or series of experiments, and which is *the force compounded by the weight of the body and the velocity of the fall*. Hamilton's contention regarding the force being exercised upon the radius alone, which consequently gives way at its weakest point, is untenable, for in Colles' fracture the force of impaction is to a great extent broken ere it reaches this bone; again, the lower end of the radius is especially devised and fitted for receiving and breaking shock when applied in the direction of its long axis.

Before proceeding further, it may be pertinent to inquire what constitutes the lesion that bears the name of Abraham Colles, who taught surgery in Dublin more than eighty years ago. Hamilton insists it is a fracture of the radius, one-fourth to three-fourths of an inch from its carpal articulation; but Mr. Colles distinctly defines it as occurring *two inches from the latter point*. In these days, however, the title by extension is made to do duty for fracture at any and all points between these two extremes, induced by impaction through the wrist and hand, whereby is produced the well-known "silver fork" deformity.—Barton's fracture, which consists merely of a chipping-off of the posterior margin of the lower end of the bone, is consequently excluded. In other words, in spite of the conflicting expressions, Colles' lesion is a fracture of the lower end of the radius, complicated by dislocation of the head of the ulna and tearing of the investing ligaments. This point being conceded, it is readily understood why the classical methods of treatment are so unsatisfactory; for in the added lesion of dislocated ulna and torn ligaments is found an injury of the synovial surfaces that in other instances—found in other parts of the body—teach us to expect serious inflammation and disintegrating action. If measures are not adopted that will with certainty place these surfaces in normal condition, relieve irritation, and afford complete rest, unfavorable or even pernicious results must in all reason be expected.

In 1869, Doctor Edwin M. Moore, while serving as Surgeon to St. Mary's Hospital, Rochester, New York, had charge of a woman who in a paroxysm of insanity threw herself from a third-story window, receiving so severe an injury of the spine as to cause death in less than thirty minutes. It was also observed that she had suffered fracture of both forearms—double Colles' fracture. Post-mortem examination of the right arm revealed the characteristic deformity, and further evidence was afforded by the fact that no crepitus resulted on rotation of the hand. No impaction was apparent, but the lower fragment of the radius was found to ride the back of the upper; the ulna was also discovered to have been carried well downward and outward from the axis of the forearm. Having, as he supposed, pressed the fragments into place, Moore was surprised to find a resistance which seemed like muscular action. This being manifestly impossible, the cause was sought for "by repeating the effort to replace the broken fragment, with the result of recurrence of resistance, with an elastic rebound." Finally solution of the mystery was found in the peculiar position of the ulna, its luxation and ligamentous entanglement. The head of the ulna, though having no bony articulation, nevertheless does articulate with the triangular fibro-cartilage, which serves the purposes of a ligament and is attached to the pit at the base of the styloid process upon which it rotates, and is itself covered with cartilage provided with synovial membrane.

The annular ligament, being a portion of the fascia of the forearm, furnishes grooves through which the tendons of the extensor muscles pass; the posterior portion passing across over the head of the ulna is attached to the pisiform and cuneiform bones, while the anterior passes from the end and inner surface of the styloid process to the cuneiform. The ulnar extensor runs in one of the sheaths of this fascia before described, and takes a course between the styloid process and the bone upon the back or side of the forearm, and thereby furnishes no small amount of support. The rebound—described by Moore as seeming at first like muscular action—was found to be due to the fact that a projection of the styloid process had been caught in the fibres of the annular ligament, by which the ulna was prevented from rising and the wrist forced back. Every ordinary method of replacing these bones was resorted to by Doctor Moore in this case. "The orthodox plan of bending the hand toward the ulnar border of the forearm only resulted in tightening the annular band on the styloid hook, folding it upon itself, and no pressure on the anterior surface of the ulna could cause its liberation, but on the contrary insured its retention with greater certainty." "An incision through the annular ligament," Doctor Moore continues, "revealed the nature of the separation. The internal lateral ligament was torn away from its attachment to the styloid by separation of the scale of compact bony tissue comprising the head of the process and its inner surface, thus leaving the styloid as a rough, ragged hook to hold the annular ligament. The attachment of the triangular fibro-cartilage to the styloid was also torn off, but the rent was through the cartilage, leaving a few tags in the pit."

It is this complete severance of a ligamentous restraint which permits the ulna to bulge outward and downward; and when the hand is carried backward and upward the styloid hook is moved forward and held at the pisiform bone by the annular ligament. If the ulnar extension, however, is carried toward the radial side, thereby the ulna is freed from the restraint of the annular ligament, and its head is moved toward the radius and through the rent in the fibro-cartilage resting against the wrist-joint, thus holding the hand out at full length, keeping the fractured ends of the radius in apposition and furnishing the best of all splints—an entirely parallel bone in its place.

The absence of crepitus may be explained by the fact that the fractured surfaces of the radius are not in contact—the lower fragment being carried up and onto the surface of the upper fragment.

Moore's examination of the left arm in the case under consideration revealed an oblique fracture one-fourth of an inch on the palmar surface and three-fourths of an inch on the back, inclining toward the ulna. The position of the ulna was the same as in the right arm, only that a little more of the bony tissue of the styloid was torn away. The annular ligament was folded into a similar cord, causing a rebound whenever an attempt was made to carry the lower fragment of the radius into its normal place.—The only point of difference in the two fractures was in the exact line of the fracture—a difference which does not, apparently, in the least bear upon the question of reduction, or retention after reduction.

Here I may mention the fact that Sir Astley Cooper, though he wrote at a time before this peculiar lesion had received the baptismal title derived from the eminent Dublin surgeon, appears to have almost stumbled upon its real ætiology; but never having had the privilege of post-mortem dissection, he was led astray by supposing the pronator quadratus muscle to be the adverse power. He assumed that fracture of the radius close to the wrist-joint entails dislocation of the ulna, and adds that "one must be very careful in its treatment in order to prevent the injury leading to permanent loss of the use of the fingers; for so soon as the injury happens, the pronator quadratus draws the fractured end of the bone obliquely across the forearm amidst the flexor tendons." He recognizes also that if the fracture and dislocation be properly reduced, the weight of the hand alone will hold the parts in apposition, for he expressly mentions this fact, which is a point made by Dr. Moore, as will be seen later on.

In attempting to prove that the fracture of the radius is the chief or only lesion, both Hamilton and Dennis—the last our latest author—mention the foregoing case of Moore's as one of exceptional severity, due to the great height from which the victim had fallen; yet Hamilton later admits the deformity of the lesion in question is due in a large majority of instances to a relaxation, stretching, or more or less disruption, of the anterior and posterior radio-ulnar ligaments, the triangular fibro-cartilage, and the internal lateral ligaments, "to which," he says, "I feel satisfied we must add the influence of strong, unbroken and oblique fasciculæ of the anterior carpal ligament." To this—without cognizance of any effect which injury of synovial membrane may have in the restoration of the integrity of the arm and hand—he attributes the deformity, which he also says "may be expected in a certain number of cases to continue, however exact and perfect may be the bony union." Indeed, though claiming that in his "own practice, deformity after this fracture is the exception," he declares when giving prognosis that "in a pretty large proportion of cases occurring in the practice of surgeons whose patients have been brought under my notice, some slight or considerable deformity remains."

In order more fully to comprehend the peculiar character of this fracture, it may be well to consider for a moment the manner in which the injury is received:

In whatever direction the body is inclined to fall, the hands are instinctively thrust out in such a manner that the first impact with earth—or whatever may be the object fallen upon—is upon the ball of the thumb, the hand being more or less rotated inward; hence the first brunt of the blow as communicated to the radius is upon its outer border, and the second—after

or during process of fracture—is caused by rotation upon the ulna and its investing and attached ligaments. Therefore, whether the force be severe or otherwise, providing it be sufficient to induce fracture of the radius, it is equally likely to disrupt ulnar or carpal ligaments. If this complication does not occur, why should this be considered more than a simple fracture and prove unamenable to any other fractures of long bones? Why is it that good results are not even expected?

Dr. Lewis S. Pilcher, of Brooklyn, N.Y., in a paper read May 16th, 1878, before the New York Academy of Medicine, claims that the distinctive feature of this fracture is the tearing up of the periosteum—reinforced by fasciculi of the anterior ligament at or above that portion of the bone which is usually involved in this fracture—that so firmly holds the broken fragments in their changed condition as to require great force and careful manipulation to restore to normal. He, however, admits the contention of Dr. Moore, that once restored to normal condition the fractured fragments are retained with very little difficulty and without resort to formidable splint machinery.

Having now endeavored to practically portray in some measure the varied influences that conspire, to complicate this lesion, and that so frequently entail unfortunate results, I may pass on to the varied methods of treatment suggested.

Reduction of this fracture receives very little attention from most writers, but an unlimited variety of splints to retain the fractured fragments in place are suggested. Nearly all advocate extension—some severe, others moderate—with manipulation of the fragments by the fingers for the purpose of forcing them into apposition; and it is generally deemed necessary to hold the parts firmly as replaced, until splints are fixed upon the arm, which latter are advised to be firmly held until fastened securely by bands or roller; also the splints are required to be so padded as to press upon the bones or portions of bones that before reduction were most prominent.

Druitt, in directing treatment, offers the following advice: "The elbow being bent and steadied, the hand should be clasped and powerfully extended, and at the same time be somewhat abducted." Long splints, longer than the arm, and well padded, are to be employed, but should, he thinks, be removed after three weeks in order to permit passive motion.

Gross, in speaking of reduction, says: "Having encircled the thumb and each finger with a narrow bandage, the better to control the resulting swelling, and the fracture having been adjusted by pressure and extension, a roller is next passed around the limb as high up as the superior part of the forearm." He then advocates application of the Bond splint.

Erichsen recommends "forcible extension and counter-extension with a view of disentangling the fragments and removing the dorsal prominence, and the application of a pistol-shaped wooden splint along the outside of the arm, reaching from the elbow to the extremity of the fingers."

Hamilton gives no method of reduction, but enters largely upon the description and application of a great variety of splints, commending most that of Hewett, which is provided with a movable hand-piece that permits flexion and extension of the hand without disturbance of the splint itself. His second preference appears to be a combination of short splints applied both anteriorly and posteriorly, but extending only to the carpus, permitting slight movement of the carpal joint. He attempts a description of Moore's method, but comes very far short of making it comprehensible—indeed, gives conclusive evidence that he does not himself understand it. He then declares that "reduction is to be accomplished by extension and partial circumduction,

the hand being grasped firmly and extended first to the radial side, and finally forwards or in position of flexion."—Evidently he had no personal knowledge of the manipulation, or comprehension of the mechanical forces necessary to be overcome in order to secure reduction.

Thomas Bryant makes no mention of methods of reduction, but contents himself with recommending the use of well padded splints extending down to the fingers and firmly fixed by strapping, broad bands, or a roller bandage. "The elbow," he says, "should be bent at right angles, and the hand held midway between pronation and supination." After three weeks he would remove the splints and give freedom to the hand. He adds: "The wrist-joint rarely ever recovers its normal movements after this form of fracture. Such deformity permanently remains, of which fact the patient should be warned."

Dennis assures us that reduction is to be made by the surgeon "grasping the hand of the patient as if to shake hands, and then making forcible, continuous and gradual extension so as to disengage the impaction and bring the lower fragment into apposition with the other." Fixation is to be maintained by splints, of which he mentions several different forms, giving preference to those so short as to reach only to the wrist.

David W. Cheever, who certainly is the peer of any living surgeon, is by no means so sanguine as some of his contemporaries. He considers the fracture one of the most difficult to treat and get a perfect result; the most careful treatment, he says, will not insure against subsequent deformity. He admits that one of the causes of imperfect restoration is that "the radio-ulnar ligaments, and also the lateral ligaments of the wrist-joint, are ruptured or stretched and strained at the time of the fracture so that the hand is partially dislocated at the wrist." With careful treatment, however, he thinks "a fair hand may be had in a majority of instances; a perfect one in some few cases; a very imperfect one, according to surgical authorities, in other cases, in spite of any treatment."

Here may be added that some recent surgical writers recommend the fixation of the forearm and hand, as far as the metacarpo-phalangeal articulation, in a plaster-of-paris bandage—a line of treatment also universally recommended by German and French authors; hence one is not surprised to learn from both these sources that the "resulting deformity is often extreme, and ulceration, phlegmon and gangrene of the soft parts frequent."

Bardenheuer, dissatisfied with the plaster-of-paris treatment, presents the astonishing alternative of confining the patient in bed, placing the hand and forearm on a support with an upward incline, the former projecting upon the splint, and attached to a cord "which is carried under a pulley fixed to the bottom of the foot-board of the bed, then brought up over a second pulley at the top of the foot-board, the distal end being attached to a weight; the extension is controlled in such direction," the author says, "as to overcome the existing deformity." This contrivance, fairly mediæval in ingenuity and inquisitorial in its fiendishness, like a deal of modern German pathology, bears the ear-marks of a ponderous, clumsy theory that has never had practical elucidation.

Moore's method, which commends itself as being both clear and rational, is likewise based upon the mechanism of the parts, and changes induced by production of the lesions as found by him in the dissections before alluded to. This is best given in detail as nearly as possible in his own words. He says:

"The patient may be anæsthetized or not. An assistant holding the

forearm of the patient, the surgeon grasps the hand of the latter, the left with the right, and *vice versa*. If now the other hand be placed under the forearm above the point of fracture, the operator is enabled to bring the thumb over the back of the ulna, when the fingers are made to embrace the radius. Traction is first made by extension; then draw the hand laterally to the radial side, then backward; now while holding backward, and while making extension, it is swung toward the ulnar side, bending well laterally, when the extension of the hand is changed for flexion—thus the act of circumduction describes nearly a semi-circle. The position of the hand grasping the forearm undergoes constant change, as it is the antagonist of the other hand in everything but the extension. As the backward position of the hand, when it is carried to the extreme ulnar side, is changed to flexion, the thumb of the surgeon rolls around the border of the ulna, and is below when the manœuvre is completed. The test of the reduction is to be found by the presence of the head of the ulna on the radial side of the extensor.

The head of the ulna rests mediately, through the triangular fibro-cartilage, on the cuneiform bone, and is restrained from going backward by the annular ligament, holding on each side the tendons of the extensor *minimi digiti* and the *extensor carpi ulnaris*, thus making a concavity corresponding in form to a socket. When it is pressed into its pocket, and the hand flexed so that the head is supported by the wrist, the position of the hand is also restored in its relation to the radius. As a result of the displacement of the ulna, the ulnar extensor is carried from its place above the styloid process to the opposite side of the ulna in an extreme displacement, though sometimes it remains above its centre—and it is this latter form of lesion wherein classical modes of treatment may secure some measure of success. To disentangle the styloid and swing the tendon of the ulnar extensor over into its place is the purpose of the manœuvre just described. The hand is drawn toward the radius to pull off, by stretching, the annular ligament.

The backward motion, accompanied by extension, renders the ulnar extensor tense, which serves to draw the annular ligament backward—this is effected by pressing the thumb upon the ulna. The circumduction carries the tendon over the side. The fact that this injury entails a luxation as well as a fracture is further proved by the circumstance that the restoration is accompanied with a snap both tangible and audible.

When the manœuvres described have been completed, as before remarked, the hand is flexed and the thumb of the operator rests on the under side of the ulna. The head of the latter appears on the back of the wrist, and corresponds in position and contour to its fellow of the opposite wrist, excepting always such swelling as may arise from effusion.

As in the treatment of any other luxation, effort at reduction should not be abandoned until the deformity is entirely removed and the operator is assured that the ulnar extensor is in its place—a fact that can be easily determined.

The dressing proposed is intended merely to hold the head of the ulna in its fascial socket, utilizing the weight of the hand to keep the luxation of the ulna reduced.—If the thumb of the operator is kept under the ulna after the reduction, it will quickly be discovered that the weight of the hand is sufficient to retain it in place.

As a substitute for the thumb, very little dressing is required, merely a cylindrical compress two inches in length and about half an inch in diameter—in fact, a single-headed roller bandage—which is placed under the ulna from the pisiform bone upward; this compress must also rest on the radial

border against the tendon of the flexor carpi ulnaris. A band of adhesive plaster, of the same width as the bandage roll, and passing over the latter, is now wrapped firmly around the wrist, being made to extend downward to the extreme point of the radius, thus clasping the bones neatly and tightly. Note that, reduction having been accomplished, Nature has provided the best possible splint. The ulna lying beside the radius prevents displacement of the fractured end of the bone, and all that is required is to replace and secure this splint in its natural position.

There is no pain in the after-treatment, and such freedom from pain is evidence of complete reduction; if pain persists after treatment of Colles' fracture, the reduction is certain to be incomplete. After three or four weeks the dressing may be removed and the patient is in position to use with perfect freedom the injured extremity the same as prior to the accident. There is no occasion for inducing immobilization of hand or wrist, which only results in stiffness from non-use. When once the fracture is completely reduced, displacement cannot again be reproduced by any ordinary movement; and the pad and adhesive strap, assisted by the position of the hand, secure all that can be desired.

I may here lay especial emphasis upon the fact that the ordinary rule of loose dressing on the first visit to a fracture of this class is a grave error. The first aim and purpose of the surgeon is to bring all the parts into immediate close relation. The plaster dressing gives slightly; the compress is by no means rigid; hence both, having a tendency to yield, are unlikely to produce serious constriction of the blood-vessels, and swelling consequent thereupon; the patient may, however, be given permission to split the adhesive plaster on the dorsal surface of the wrist in about six hours if swelling demands; and it is perhaps advisable for the operator to do this himself soon after the dressing is applied. Comfort and invariably satisfactory results are best insured by placing the arm in a semi-flexed position in a narrow sling, the hand being prone and allowed to overhang, when by its own weight it secures the ulna in proper position—that is to say, the sling supports the wrist through the compress, the wrist resting on the ulnar side; and yet this is not essential except when the swelling is considerable, which rarely persists more than a few days.

Regarding passive motion, upon which considerable stress appears always to be laid—this, as already intimated, is self-insured, since perfect freedom is accorded to the hand and its controlling muscles; consequently there is no tendency to ankylosis or adhesion of the tendons to their sheaths. Results which produce the deformity most frequently met with and apprehended after this injury. While writers with great unanimity advise early resort to passive force, they one and all appear to ignore a fact which experience readily teaches—that early, forcible, passive motion aggravates synovial irritation, and in cases of advanced age especially tends to the perpetuation of the deformity which it is desired to avoid.

During an active and somewhat diversified professional career of more than forty years, it has been my fortune to encounter a considerable number of cases of Colles' fracture, and in varied ages and conditions of life, and likewise to observe numbers under the care of immediate professional friends. During the first half of this period the results were more or less unsatisfactory, according to the degree of the lesion, and ranged from partial ankylosis to wasting and loss of muscular power in the forearm with adhesions of tendons to their investing sheaths. The methods of treatment, too, were widely varied; every form of splint was carefully and hopefully tried, but with no

accession of better results. But with a knowledge of anatomical changes and methods of adjustment, as suggested by Dr. Moore, and so fully attested in his autopsies—admirably explained in his paper before the New York Medical Society in 1870—success has not only been invariable, but most flattering. It is with no little degree of pride, therefore, that I am able to assert the results during the last half of my professional career have been doubly satisfactory—satisfactory to the operator in relieving him of all fears as to the litigation that is so frequent a sequel to treatment of this lesion (said to occur in about eighty per cent. of cases); satisfactory to the patient in that he is saved all suffering, and obtains a perfect wrist. By following this method of treatment, Colles' fracture is no longer a *bite noire*; and yet to-day one is continually brought in contact with deformities resultant upon this lesion, and so invariably as to lead to the belief that when authors admit, as they all do, that successful results, as a rule, are only partial, this utterance is but a half-truth, and arises from the pride which disinclines every man to admit that any procedure on his part is always a failure; and I believe it would not be saying too much if I were to add that a large number of the admitted partial failures are, in fact, total failures. Indeed, no less an authority than the late Henry Bigelow, of Boston, who was admittedly without a superior on this continent in the domain of surgery, was wont to admit that Colles' fracture, when complete, under the old orthodox methods of treatment resulted invariably in more or less deformity.

Walkerville, Ontario.

British Medical Association Column.

Owing to the fact that the meeting of the General Council of the Association had been delayed until January 20th, we are still ignorant of the names of those selected to give the general addresses and to be office-holders in the various sections in the forthcoming meeting.

We can only here repeat that the Local Executive in Montreal has, throughout, felt that it will be highly conducive to the success of the meeting, if leaders of the profession in the Old Country, rather than Canadians, be chosen to occupy the leading positions in connection with the forthcoming meeting. This, not from any disbelief in the abilities of Montrealers and other Canadians being able to prove themselves worthy occupants of the positions, but from a belief that the known presence of well-known men will attract to Montreal a greater number of Canadians and of practitioners from Great Britain and the colonies in general. Judging from a telegram recently received from Dr. Roddick, the President-elect, he has found the authorities in England most anxious to aid in making the meeting successful along the lines suggested by the Executive. Dr. Roddick left Montreal on the 1st inst., and is devoting some weeks in England to the business of the Association; he was, we learn, received with open arms, and a dinner was given in his honor. Not only will he be able to post the officials of the Association with all necessary information concerning what has been done in Canada, but he will, we trust, be able by personal interviews to secure the attendance and active co-operation of many who are first and foremost in the profession.

Since our last issue, we have received from England the exact wording of the resolution of the Council of the Association, stating who are

and who are not eligible to be members and to attend the meetings of the Association. This resolution was passed two years ago, and inasmuch as we hear on all sides that very large numbers of members of our profession in the United States are proposing to attend the Montreal meeting, it may be well again to point out that, however much the Local Executive desires to welcome American practitioners, its hands are tied. Those visiting Montreal must either be members or invited guests if they are to enjoy the privileges of the meeting, and only British subjects can be members. The resolution runs as follows:—

Resolved, That while recognizing it as both a duty and a pleasure to accord a hearty welcome to foreign medical practitioners attending the annual general meeting of the Association, the Council is of opinion, and is advised, that it cannot extend to such practitioners the privilege of actual membership, having agreed to the origin and constitution of the Association, and to the fact that in the opinion of the Council the word 'Qualified,' in By-Law No. 1, means British subjects who are registered or entitled to be registered in the Medical Register of Great Britain or Ireland, or British subjects residing in any part of the British dominions, who are legally entitled to practise in such dominions, and that such definitions cannot be further extended."

Since our last issue, also, the Excursions Sub-Committee has obtained most favorable terms from the Grand Trunk and Canadian Pacific Railway companies. They offer to the Association and its guests to convey them at half-fare as far as Sarnia on the one system and Port Arthur on the other. In addition, the Canadian Pacific Railway will give the same rates to those wishing to cross the continent. Return tickets will be given from Montreal to Vancouver for one single fare, and the privileges of stopping over at the leading places

of interest *en route*. The committee has not as yet received absolute information from the railway companies as to whether these terms apply to Canadian members of the Association as well as to members from other parts, but the inference is that this is the case.

The Local Entertainment Subcommittee has also been busy, and proposes to give members fond of exercise opportunities of showing their powers in golf, tennis, etc., against the visiting members from Great Britain. It is quite prepared, also, to have a lacrosse match, provided a sufficient number of members from the other side are acquainted with the game. Lacrosse, we may add, has of late years made considerable strides in the north of England and of Ireland, and again round London.

Arrangements have already been made for a ladies' committee to entertain the wives and daughters of visiting members.

We learn from Toronto that a most attractive excursion through the Niagara Peninsula, Kingston and the Thousand Isles has been arranged for those attending the meeting of the British Association for the Advancement of Science, and intending to be present at the Montreal meeting also.

Reports of Societies.

CHATHAM MEDICAL AND SURGICAL SOCIETY.

The regular monthly meeting of this Society was held in the United States Consul's office, on Thursday evening, January 14th, 1897. There were present, Drs. Duncan (President), Sievewright, Charteris, Musson, McKeough, Holmes, Rutherford, Hall, Tyé and R. V. Bray (Secretary).

Minutes of previous meeting read and adopted.

Drs. Hall, Charteris and Backus were appointed the consulting staff of the Public General Hospital for 1897.

"*Osteosarcoma*."—A paper on this subject was read by Dr. Charteris (see page 121). The case was well presented, and called forth a good deal of discussion. The doctor exhibited some photographs of the case, at different stages, also a specimen of the growth removed from the head.

Case in practice.—Dr. Holmes exhibited a carious sacrum, and gave history of the case as follows:—J. S., a farmer, aged 24; good family history; had typhoid fever in spring of 1896; made a fair recovery, though never regained his former vigor. In November, fever returned and patient visited his own medical man in a neighboring town; he complained of a great deal of pain in the region of lower lumbar sacral vertebræ, and temperature was 103°, pulse 108. An abscess finally pointed on left side of sacrum; this was opened and it discharged freely. The fever still continued high, and I saw him in consultation on December 7th. We decided to have him sent to Chatham General Hospital; this was done; and on December 27th we opened a sinus which extended from near the great trochanter on left side, in front of the sacrum, into the pelvis. Dead bone was found on the anterior surface of one of the sacral vertebræ; a drainage tube was inserted and the parts washed and dressed. There was a slight improvement for a few days; the temperature in the morning being normal, in the evening 102°, but the temperature began to rise again until it reached 104° in the evening; pulse 130. Thinking drainage might not be good, we made a counter incision on right side of sacrum on January 7th, 1897, and passed tube through between the sacrum and rectum. Patient did not improve, and died in a few days after this last operation. Examination after death showed that the sacral vertebræ were all in a carious condition.

Drs. Duncan and McKeough will read papers at the next regular meeting.

Special Selections.

WOMAN AND THE BICYCLE.

Under the title of "Immorality in Canada," an editorial appeared not long since in our eastern contemporary, the *Medical Record*, which was immediately seized upon and made to do duty over again in some of the Canadian medical journals, along with added editorial comments most unseemly to the dignity of the profession. Within a few days the same "hash" has reappeared in the *Record* under the guise of "Canadian Correspondence."

This "tempest in a teapot" arose from an editorial that appeared in the DOMINION MEDICAL MONTHLY dealing with bicycle riding for women, and pointed out that such in many instances tended to promote erotism and erethism. This editorial made no accusations against Canadian or other women, and such could be imagined only through error or the workings of a mind itself impure—indeed, no Canadian or American woman, notoriously, can find a better champion than the author of this article, which dealt simply with well-known and cold facts. What renders the matter more conspicuous is that various papers, editorial and otherwise, have appeared from time to time in foreign and American journals, *The Medical Age* included, that treated of this same subject along the same precise line as the DOMINION MEDICAL MONTHLY, yet not one has hitherto been deemed a fit subject for attack. The only comment possible then, is that the editor of the *Medical Record* did not give the editorial in the DOMINION MEDICAL MONTHLY the careful perusal that is always demanded when one presumes to act the critic; and, second, that the attacks by confrères and rivals had their inception in personal and political differences rather than any desire to perpetuate the errors of the *Medical*

Record or to uphold the morality of Canadian women—than whom there are none more moral on the face of the globe, or less in need of defence of this character, which certainly is not at all to their taste.

Such wrangles are at all times unseemly. The Canadian medical profession as a body stands deservedly high—higher perhaps than any other like body in the world—and indulgence in petty personalities because of individual prejudices and jealousies, political differences, etc., etc., tends to besmirch the noble escutcheon of Canadian medicine. Still more puerile are remarks calling in question the character and standing of a rival journal—whatever may be the status of the DOMINION MEDICAL MONTHLY, we discover on application to a mercantile agency that financially it is ranked six times higher than any other Canadian medical publication, and that advertising agencies accredit it with a circulation greater than any of its Ontario contemporaries.

But all this is none of our affair. We do not propose to act as champion in any sense, except of medicine as a science pure and simple; we know nothing of the personal causes that have led to such unprofessional and unethical conduct; but we do protest against such being aired in periodicals of a professed scientific character. Medical journals above all should be edited without prejudice, for true science has no preferences and no room for innuendos or bickerings; and medical science should deal only with matters of interest to the profession at large.

In spite of all that may be said by interested dealers, it is notorious that the bicycle is in many instances unsuitable to women, that the best saddle does not meet the comforts or requirements of the female pelvis, that aside from the pedal motion that ever tends to provoke erethism, the jolt of the machine is not without evil effect upon the uterus and other generative

organs, and is especially apt—particularly when fostered by improper methods of dressing—to induce laxity, version, prolapse, with all the concomitants of endometritis, menorrhagia, etc. During the past summer, in one institution the writer knows nearly fifty women were treated gynæcologically whose ills were in each and every instance directly traceable to the bicycle.

As already intimated, both bicycle saddle and pedal are radically wrong as regards the moral safety and physical comfort of woman, and the effects induced are, unfortunately, slow and insidious, the exhilaration of the exercise for a time over-balancing all else.

As to the morality or immorality of the bicycle, this is a matter of consideration for the individual woman or man. There are doubtless as many moral women to-day as at any time in the history of the world, and likewise as many of the opposite character. The danger is not to the mentally strong—not so much to the full-fledged woman as to the weak and the adolescent. The medical profession has ever recognized that there are certain sexual evils readily fostered among women, and consequently when a new form presents itself it is a duty to utter warning rather than to be suddenly seized with a spasmodic virtue that denies what is well known to exist. The editor of this journal, as the result of personal knowledge and investigation, has several times been led to point out the dangers and defects of the bicycle as regards woman, but such has never caused a ripple of excitement among either the medical journals of Michigan or of the United States; neither has there been any suggestion that this journal has attacked the virtue or morality of the womanhood of any state, province or country. This subject as a whole is far from being new except in the variety of its application. The profession has ever been cognizant of

such facts as are embodied, and that they have not been unknown to the laity is shown by the fulminations that appear in the works of the early "fathers" of the Church. We have before had occasion to point out that theological physiology and pathology are not to be trusted in this direction.

It is a fact that so-called bicycle schools do tend to foster immorality and provoke sensations that in many instances were before unknown to individual members of the sex. That woman may be prone to erotism is not to her shame any more than the same is to the shame of man. Theological teaching to the contrary notwithstanding. Erotism is a physiological attribute implanted by Nature as one of the means of perpetuating the kind. That erotism and erethism are observed and rightfully and wrongfully made the subject of lewd comment by male assistants in bicycle schools for women is well known, and in some instances notorious; such is the natural sequence of employing cheap and vulgar "help," and, considering the remuneration offered, is without remedy; and that filthy gossip should constantly increase, is to be expected. We are glad to know that the better and more refined women do not patronize "bicycle schools," but receive such teaching as they demand at home or in private.

But the chief fault lies with the machine itself, which has been widely, carelessly, persistently and unmistakably heralded as affording a health-giving exercise—one inimical to all maladies—all in the interest of the dealers. Like everything else, the bicycle is abused by some, and often by many—more in the past perhaps than at present, because this is the invariable rule regarding every new craze or device until the novelty thereof has worn off. The remedy lies not in entirely forbidding what may under certain conditions prove a desirable exercise to some women, but an improvement in the vehicle. An appropriate seat alone will not

meet the demand, but a means of propelling is required that will do away altogether with the reciprocating pedals. In fact the tricycle is more nearly the machine adapted to womanhood, and very little ingenuity would be required to fit it with a lever whereby the inductive power could be given by the knees, acting in the same direction simultaneously. Doubtless the day is not distant when the induction of motion in all vehicles of the class will be relegated by some such device as just mentioned, or, better yet, to a small motor of the petroleum or storage battery type. Fortunately the question is one that with time and the advance of progress will be sure to regulate itself. In the meantime appropriate warnings are certainly not amiss, more particularly as regards the young verging upon or just past the budding of womanhood.—
Editorial in Medical Age.

VENESECTIONS.*

By C. W. BERNTHEIZEL, M.D.,
Columbia, Pa.

In consequence of the unwarrantable disuse of the lancet as a remedial agent, the subject of this paper, to my mind, becomes an important matter for unbiased consideration and discussion. It is an undisputable fact that no science has made greater progress within the last century than has medicine and surgery, embracing, of course, gynecology and the kindred sub-divisions. This progressive spirit has not been confined alone to the armamentariums of the physicians and surgeons. Theoretically, the profession has accomplished prodigious and unprecedented scientific results. Old theories, once entertained and advanced as plausible and conclusive, have been consigned to a merited

oblivion as false and misleading. This rejection of erroneous theories and practice, and the discovery and adoption of new and scientific methods, constitute the all important factor in the elevation of the medical profession to its lofty position in the scientific world to-day. And, while this commendable advancement elicits the most profound admiration, we cannot but deplore the rejection, or rather the disuse, of some of the old remedial agents, the potency and efficiency of which we still recognize and admire.

Among such remedies, the lancet—that good, old friend that has helped us out of many a difficulty, and has saved the lives of thousands—must be classed. The efficacy of venesection in acute inflammatory diseases of a sthenic character, is not doubted by those who have resorted to the remedy in the past, nor can this be effectually disproven by its opponents. Who, among the older members of the profession, cannot distinctly recall the promptness with which the hurried and difficult respiration in the first stage of pneumonia or pleurisy was relieved by a vigorous blood-letting? I would not pretend to deny that these two diseases are, evidently, of their infection, bacterial in their character; and yet I insist that, whether such or not, the prompt relief of the distressing symptom of dyspnoea in the incipency of these distressing affections by venesection, is indubitable evidence of the utility of the remedy. We must not fail to recognize the necessity of employing veratrum viride, digitalis, strychnine, and belladonna in the after treatment of pneumonia; nor should we undervalue the use of antipyretics, and the judicious use of cold compresses, recommended so highly by Gundrum.

Still cases can be recalled in which the depressing effect of the several antipyretics on the respiratory and cardiac motor centres called for their immediate discontinuance. In the

*Read before the College of Physicians and Surgeons, of Columbia, Pa.

advocacy of the lancet in the first or congestive stage of pneumonia and pleurisy, when the blood-vessels ramifying through the lungs are engorged with a superabundance of blood, my purpose is to endeavor not to detract from the efficacy of proper drugs employed at the proper time. When the lancet is used freely in the acute formative stages of pneumonia and pleurisy, occurring in robust and vigorous subjects, free from enfeebled cardiac complications, it will often cut short, and sometimes even abort, the disease.

Some time ago I had occasion to meet a brother physician in the first stage of a typical case of pneumonia. The patient was suffering intense pain; the respiration was rapid and laboring; the pulse full and bounding; the face flushed to a livid hue, and altogether he was a picture of distress. As the young man was of a robust, vigorous constitution, I immediately suggested venesection. My colleague was horrified; said he "never owned a lancet, and never proposed to use the antiquated, barbaric instrument;" but, continuing, he said, "If *you* assume the responsibility, go ahead." I bled the patient freely, and in a very short time, we had the extreme satisfaction of seeing him breathe easily, with scarcely any pain. We followed the bleeding with further antiphlogistic, nutritive and expectorant treatment, and, in a comparatively short time, the young man was well. Who can doubt that the liberal abstraction of blood in his case was instrumental in aborting the attack of pneumonia?

How often have we seen the salutary effect of a thorough bleeding in apoplexy! It requires careful discrimination as to the applicability of the lancet in these cases. A patient with a weak and irregular pulse, a pale countenance and feeble heart action—in fact every symptom denoting anæmia of the brain, with perhaps serious effusion, should not be bled—since bleeding would still further

debilitate the heart's impulses, and the arterial blood going to the brain would thus be still more decreased. But I am a firm believer in the lancet in cases which are characterized by stertorous breathing, flushed face, full, bounding pulse, with violent acting of the heart—or in other words whenever the condition of the patient denotes a robust, plethoric habit. Niemeyer says: "If the impulse of the heart be strong and it sounds loud; if the pulse be regular, and no signs of commencing œdema of the lungs exist, we should bleed without delay. Local bleeding by leeches behind the ears, or to the temples, or by cups to the back of the neck, cannot replace general bleeding, but may be used as adjuvants."

What substitute is there at command to take the place of the lancet in the onset of puerperal peritonitis? Fortunately, true cases of this formidable and dangerous disease are rather infrequent in private practice, but, yet they do occur. If in such an attack the first twenty-four hours have been allowed to elapse, the use of the lancet, in the majority of cases, would be injurious instead of advantageous. The lancet should be used early, and as a rule eighteen to twenty-four ounces of blood should be taken from the arm in a full, flowing stream, or until the indications of approaching syncope appear, the patient being in a partially erect position during the bleeding, in order that the desired effect upon the system may be produced so speedily as possible.

In convulsions, superinduced in adults by reflex, or sympathetic action, copious venesection is most efficient. Thirty years ago I was called to see a butcher weighing two hundred and fifty pounds. He was writhing in the most horrible convulsions, and inquiry revealed the fact that he had eaten at least a pound of garlic sausage, freshly made, for dinner. The urgent indication in the case was, of course, to unburden the stomach; but to administer an emetic

under the circumstances was an utter impossibility. Then, again, to allow the continuance of the convulsions involved the danger of a rupture of the blood vessels of the brain; therefore, I immediately bled him, taking about twenty ounces of blood from the arm. The convulsions ceased almost immediately. A brisk emetic brought forth the garlic sausage, and the man was well, and soon devoted his attention to the slaughtering of *the other hog!* Bleeding in that case was certainly "the right thing in the right place."

But it is probably in puerperal convulsions that the lancet is of most avail. Ramsbotham says: "A convulsive paroxysm during labor may occur under two extreme states of the system, diametrically opposed to each other; the one in which the cerebral vessels are inordinately distended with blood; and the other, when they have been drained almost empty, as in the case of excessive hæmorrhage; and it is a curious fact that the two perfectly opposite states, viz., too great a fulness of the vessels, and too great emptiness, will produce, in this respect, exactly the same phenomena." Yet, whatever may be the objections advanced against the use of the lancet, it is the only sheet-anchor in this frightful disease. Nor should it be used with too great caution in a case in which it is not contraindicated by previous exhaustive hæmorrhage, so much as sixty ounces may be required to be taken in a very few hours.

NOTES ON THE TREATMENT OF DIPHTHERIA.*

Dr. S. Hartwell Chapman, in the *New York Medical Journal*, says the question of the value of the antitoxin treatment is still undecided. While statistics seem to show that as a remedial agent it is worthy of fur-

ther trial, yet the number of cases of death from its use as a prophylactic would cause us to withhold complete confidence.

It possibly may be therefore of interest to the members of the society present to listen for a few minutes to the report of another and older method of treatment which has seemed to be serviceable in my hands, and of which the statistics show almost if not quite as favorably as those of the more modern treatment.

My note-books give me the histories of thirty-three cases during the past twelve years—a small proportion of cases in comparison with those in the practice of many of the members of the Laryngological Society, but sufficient to enable us to formulate a fair statistical record. The cases are divided as follows: Postnasal, 2; tonsillar, 9; tonsillar-pharyngeal, 11; tonsillar-pharyngeal laryngeal, 6, laryngeal, 5. Seven cases terminated fatally—namely, 2 postnasal, 1 tonsillar, 1 tonsillar-laryngeal, 3 laryngeal.

Of the laryngeal cases, one death was due to the accident of the premature withdrawal of the entire tracheotomy tube by my assistant.

The tube needed cleaning, and while extracting the inner tube the assistant slipped the external out, and before it could be replaced death occurred by asphyxia. Six deaths then in thirty-three cases, or a little more than eighteen per cent. Of these six cases, five were seen in consultation at a stage when the disease had already become general.

In four of the eleven laryngeal cases tracheotomy was performed, with three deaths from general infection. In all of the cases seen and treated during the early stage of the disease, with the exception of one tonsillar, the patients recovered.

The method of treatment adopted was the following, the remedy used being the protiodide of mercury.

Theory of treatment by this drug was supported by experiments upon

* Read before the American Laryngological Association at its eighteenth annual congress.

the behavior of the diphtheritic germ in the presence of numerous antiseptics, made in my own laboratory in the years 1873 and 1874.

The devitalizing power of forms of mercury was found to be the greatest; and of all forms of mercury the protiodide was the most efficient. A solution of one grain to six ounces of sterilized water was the preparation used in these cases, applied in three different ways—first, hypodermic injection into the submucous tissues surrounding the exudation; second, by deep injection into the tonsillar tissue; and third by spray upon the pharynx and larynx.

The spray and injections were used simultaneously, a drachm of the fluid being injected two and sometimes three times a day, and the spray used in the intervals between the injections.

Not to take too much of your time, let me, in closing, give the history of three cases in the same family:

In February, 1884, Mrs. W., New Haven, aged forty-three years; well-developed membrane on both tonsils.

Son, aged fourteen years; membrane extending over the left tonsil and one-quarter of the left half of the pharynx.

Son, aged six years; no development of membrane for three days; then uniform membrane showing over the entire pharynx and arch, at first appearing like a thin film of milk, but growing in twenty-four hours to a well-formed distinct membrane.

No treatment was given this latter case until the membrane became well defined—simply for the purpose of observation and experiment.

These cases were treated in the manner described, with the result that, first, no spreading of the membrane took place; second, that in twenty-four hours the membrane began to shrivel and dry, and by the end of the third day had in each case been exfoliated and expelled.

As a prophylactic, the mercury seems of no use.

I am not in the habit of isolating cases of diphtheria, but of causing other members of the family to use the spray freely during the continuance of the disease.

This is a case in point:

Child, Clara J., aged five years, March, 1886, New Haven; membrane of the pharynx and brim of the larynx.

The mother begged to be allowed to care for the invalid, although at the time she was nursing a child eight months old. This I allowed, taking the precaution to use the mercury as spray in both cases.

There was no spread of the disease.

In conclusion, let me say, that I still use the remedy as described—having gained confidence in it for all cases where constitutional infection has not yet taken place.

ON INTERPROVINCIAL REGISTRATION.

In the *Montreal Gazette*, of December 11th, was printed a leading article written, we are informed upon good authority, by a layman, and headed, "A Great Opportunity." This article so fully expresses our own opinions upon the matter, and withal is written in so vigorous a style, that we venture to reproduce it.

"The annual meeting of the British Medical Association in Montreal is for many reasons an important occasion. The mere sending out of the programmes will draw attention all the world over to the attractions of Canada for tourist travel, and the advent of so many visitors is certain to make widely known the material resources and the industrial and social advancement of the Dominion. These are facts which it is to Canada's advantage to have known in the Old Country, and there is no class better fitted to spread that knowledge than the medical profession, who are

constantly brought into friendly relations with all classes of the population. But there is another advantage likely to accrue from the meeting of no less moment. It will give an impetus to medical education and research all over the Dominion, and will bring the doctors here in touch with the profession in the Old Country. It will also show the most influential members of the profession in the United Kingdom what a high standard of medical education has been reached here, and that our institutions will not suffer by comparison with those on the other side of the Atlantic. But to take full advantage of this opportunity, it is necessary that an important step should be taken in the interim. The Canadian Medical Association will meet at Montreal on August 28th and 30th, immediately before the British Medical Association meetings, and the scheme of interprovincial registration, which was referred to the provincial Councils at the last annual meeting, will come up for discussion, and, it is to be hoped, for final adoption. The medical profession in Canada have had this subject under discussion for many years, and it is quite time that it should be finally dealt with. The present condition of affairs is anomalous and vexatious. A doctor on one side of the Ottawa river cannot attend cases on the other, and Montreal specialists are prevented from being called in to cases in Ontario. Even in the matter of legal evidence, opposing counsel may prevent a doctor from being heard because he has not the provincial qualification. All this is very absurd, and a serious injury to the public, which has a right to the best medical attendance procurable in the Dominion, wherever patient or doctor may happen to reside. The present arrangement is also a great disadvantage to medical students, who do not always know where they will find their best opportunity to practise, and are, therefore, compelled, as a matter of precaution, to take two or three

provincial qualifications, thereby needlessly increasing the fees and the examinations. Another unfortunate result is that no Canadian qualification is recognized by the Medical Council of Great Britain as giving a right to practise in the Old Country, and Canadian diplomas are not regarded with the esteem they deserve. The McGill and Bishop's courses are a sufficient guarantee for the preliminary work, but the Canadian graduate has still to do some months' studying in England and take the final examinations before he can obtain an English qualification. In Australia, where the various colonies have a common standard of examination, the graduates have obtained the right of registration in England on merely presenting their diplomas. Medical education in Canada is quite as far advanced; but the General Medical Council of Great Britain say, reasonably enough, 'We cannot be expected to enquire into the various qualifications that obtain in the different Provinces of the Dominion; adopt a common interprovincial standard, and we will gladly admit you to registration.' At the meeting of the British Medical Association in Montreal next August there will be an unparalleled opportunity for advancing in this direction, if the scheme of interprovincial registration now before the provincial boards is adopted in the meantime. The British Medical Association takes cognizance of all matters of interest to the profession, and after seeing our system of medical education, the equipment of our institutions, and the men who administer them, it might very properly pass a resolution recommending the Medical Council in England to admit Canadian practitioners to registration in the Old Country on presentation of their diplomas. Such a recommendation could hardly fail of its effect, for the leading members of the Medical Council are also leading members of the Association, which is thoroughly representative of the pro-

profession in the United Kingdom. But in order to gain this valuable privilege, it is absolutely necessary that there should be a common standard of examination throughout the Dominion. So long as the various provinces refuse to accept each other's qualifications, one can hardly expect the British Medical Council to accept any of them."

There are in this article one or two points that require possibly some little explanation. We believe, for example, that the reason why the authorities in England permit Australian practitioners to register is not that there is a common standard of medical education throughout the Australian colonies, but because those colonies have up to the present time remained separate and are not confederate. If, as is not outside the range of possibility, the Australian colonies unite, then according to the present British law they will lose their privilege unless they establish some scheme of interprovincial registration. But as the matter stands at present undoubtedly the Australian graduate can register in Great Britain, and can in consequence practise over a large portion of the empire, and the Canadian cannot, until some common scheme of licensing is agreed upon by the Provinces of the Dominion.

We are glad to learn from the pages of our esteemed contemporary, *L'Union Medicale*, that in the Province of Quebec the report on interprovincial reciprocity from the Canadian Medical Association has already been brought before the Provincial Board of Medicine of Quebec, and that a committee composed of Drs. D. Mareil, A. T. Brosseau, J. M. Beausoleil, E. E. Laurent and C. S. Parke have reported to the Board in favor of adopting the scheme put forward. This committee asks that the officers of the Council be authorized to sign a preliminary treaty with the other provincial Boards of the Dominion, and with that of Prince Edward Island, so as to be able to give a

special license conferring the right to practise throughout British North America.

As the *British Medical Journal* remarks in another able leading article, it is fitting that the sixtieth anniversary of the Queen's accession be celebrated in the profession by an act which indicates the imperial unity of our profession, namely: this Montreal meeting of the British Medical Association. The members of the profession in Canada can, it seems to us, celebrate the great occasion in no more memorable way than in drawing together and, by accepting interprovincial registration, gaining great and imperial opportunities.—*Montreal Medical Journal*.

FRESH AIR CURE FOR CONSUMPTIVE CHILDREN.

A most interesting charity has been carried on in France for several years known as the "Fresh Air Cure for Consumptive Children." Two hospitals for this purpose are located one at Ormisson and the other at Villiers-sur-Marne. The medical men interested in this work consider it the most promising method yet employed in trying to reduce the rate of mortality from consumption in France, which was becoming fearfully prevalent, the death rate reaching in some cities (Paris, Havre and Rouen) almost 80 per cent.

We quote from a recent report of the work by Dr. Blache; he says: Medicine forms no part of the treatment, except the occasional use of cod liver oil, in the cold season. The work of cure, therefore, is left entirely to fresh air and to the hygienic living of the patients. With the exception of a very few cases where persistent fever keeps them in bed during the first part of their stay at the hospital, all the patients are obliged to follow the regular system of living. They rise early, bathe well, are dressed all

in linen garments loosely fitted. Twice a week, unless otherwise ordered by the physician, each patient is bathed and vigorously rubbed by an attendant. After the toilet the patient eats a light breakfast; this is insisted upon for each child, for suitable and regular meals have proved most necessary in aiding the treatment. After breakfast the children are sent into the garden, the park, or covered playground, where they enjoy games and exercises varying with the seasons. The most serious cases are kept indoors, lying in reclining chairs, well wrapped in warm coverings, and breathing the fresh air admitted to the room. Except for the two principal meals of the day, the entire time is passed in the open air, and the rooms are also ventilated with the greatest possible amount of fresh air. This out of door programme has been strictly followed since 1890, in all seasons of the year without any difficulty. As to the amount of nourishment taken by the little patients, it is, of course, rather difficult to give an exact reckoning, but the following table is as nearly correct as is possible.

For the two principal meals of the day:

Soups	
Bread	150-200 grammes
Meat	125-150 grammes
Vegetables and fruits	4-7 deciliters
Wines	$\frac{1}{4}$ litre

The early breakfast consists of porridge, coffee or chocolate, and the lunch of bread and milk. Considering the youth of the patients and the lack of appetite characteristic of consumption, this is a relatively high average.

Results.—Each year the condition of the patients is set forth in a report to the medical committee of the institution. For five years, or since the beginning, these reports have, without the least variation, shown the most

satisfactory results, surpassing even the hopes entertained by its founders.

The yearly average of cases treated	109
Number of cures	47.71 p. c.
Number improved ...	40.29 "
Number unchanged ..	8.79 "
Number of chronic or cachetic	4.59 "
Number of deaths ...	3.44 "

We have sought to give some explanation for these figures, which we must confess are surprising. The results have been uniform and much more favorable than we had the right to hope for. It is evident that the results arise from special conditions. All the patients admitted are proved to be afflicted with the disease, but we are careful to prevent as much as possible the admittance of patients in whom the disease is far advanced or has become chronic. On the other hand, the majority of cases treated at our hospitals are brought there in the worst conditions, from surroundings most wretched and unhealthy and with hereditary tendencies to disease; and it is exactly this miserable condition in which we find the children that permits them to derive the more benefit from the rational treatment of fresh air, good food and general hygiene, under which we place them. And this system of obligatory outdoor exercise, regular habits, cleanliness and rules of hygiene is the cause of the satisfactory results already shown. Moreover, the consumptive children readily accustom themselves to this life, and then neither the cold of winter nor the heat of summer seems to affect them.

In closing this report, Dr. Blache adds: "We fear that we may be considered too optimistic, but we are anxious to prove as soon as possible the certainty that consumption is eminently a curable disease, and curable in infancy. We will say a disease more easily cured than many others, since its cure requires, in a word, only

a persevering, regular and systematic application of a special, well-understood hygiene."—Translated from the *Journal d'Hygiene* by M. R. B.

THE BATTLE OF THE CLUBS.

YARMOUTH.

We have on previous occasions given some account of the origin of the difficulty between the medical clubs in Yarmouth and those medical men in the town who have hitherto acted as their medical officers. Briefly stated, the facts are that the medical officers, finding that the club system was being abused, and that under the circumstances which had grown up the practice had become worse than unremunerative, proposed to the clubs certain alterations which, as we pointed out at the time, were of a most reasonable and moderate nature. They comprised certain increases in the scale of fees and the right to discriminate as to the social position and earnings which should exclude persons from receiving medical attendance at club rates. These proposals were rejected with vehemence by the club managers and members, and the result has been the establishment of a medical institute by the friendly societies which have amalgamated for the purpose. As medical officer to the new institute, the clubs have obtained the services of Mr. T. P. Devlin, L.R.C.P., L.R.C.S.Ed., who is described as formerly of Bristol. The amalgamation, we are informed, at present possesses about two thousand members, and consists of the members of those clubs that were able, owing to the fact that their medical officers were subject to annual re-election, to terminate their agreements without notice. Other clubs have given three months' notice to their medical officers, and will join the institute at Lady Day; after that date the probable strength of the membership for the amalgamated institute will be about six thousand.

It will then comprise all the clubs in Yarmouth, with the exception of a few societies numbering perhaps some four hundred or five hundred members who have accepted the terms of their medical officers. Throughout, we are glad to learn, all the medical practitioners in Yarmouth have held together, and there is no sign of wavering. The clubs have boasted in the press that the "doctors' strike," as they term it, "has completely failed." On the other hand, the medical men themselves consider that through their united action the attempt on the part of the clubs to force their medical officers to work for them at starvation pay "has completely failed." At any rate, the profession in the borough has been relieved of much unremunerative work, and there is reason to believe that those clubs which have been wise enough to perceive the advantage of retaining their old medical attendants by conceding the terms asked will increase rapidly in numbers and prosperity.

The medical profession in Yarmouth are to be congratulated on the stand which they have made, but not so much can be said for the medical man who has thought fit to come to the rescue of the clubs by accepting the office of surgeon to the new institute. When in March next the membership of the clubs rises to six thousand or more, it is hardly to be supposed that the committee will expect one medical officer to carry on the whole of the work, and we would earnestly warn members of the profession who may be approached with the object of inducing them to accept office under the clubs, to consider well whether their duty to the profession and to themselves ought not to lead them to refuse to give any assistance to a system of practice contrary to the best traditions of the medical profession, and contrary, we firmly believe, to the best interests of the public.

A satisfactory result of the contest is that it affords evidence that

practically the whole profession of an important town can be got to work together for the common good. Let this spirit spread and gather strength throughout the country, and the number of candidates for the post of medical officer to such institutes as this, which at the present time is by no means great, will diminish—let us hope—to the vanishing point.

PENGE AND BECKENHAM.

There has been lately much agitation throughout the Penge and Beckenham district among the local profession on the question of benefit clubs, and a determination has been steadily growing to make a stand against the present abuses of the club system.

At a meeting which took place recently under the auspices of the Beckenham and Penge Medical Society, it was unanimously decided that unless certain alterations were made, the doctors of the district would decline in a body to attend for the clubs in future illnesses on club scales. The suggested alterations were: (1) a wage limit of 35s. per week; (2) that the subscription of members be 6s., instead of 4s.

Mr. Frank Sturges, the President of the Penge and Beckenham Medical Society, in a letter to the *Daily Telegraph* of December 28th, has put the matter extremely well. "For the protection of the dignity of the profession," he writes, "it is necessary to establish a minimum fee, not a fixed amount, but one varying according to the condition of the locality." "As we wish to fix our own minimum," he continues, "and the rate is to be one well within the reach of the humblest of our patients, it is plain there must be some discretion as to those who should enjoy it, and that can only be brought about by the fixing of a wage limit. We contend that, while it is contrary to the ethics of a great profession to refuse help to the poorest without fee or reward, it is just as much so to attend the comparatively well-to-do at a rate which,

if generally adopted, would land the doctor in the poorhouse." He concludes by denying a statement that appeared in the press saying that the Penge doctors were not unanimous in their vote on this question.

It is satisfactory to find that the opinion of the profession is rapidly growing on this important question. Medical men are now combining in many places throughout the country to demand a more equitable rate of payment for their services, and to check the abuse by which wealthy members are allowed to avail themselves of medical aid at a rate of payment never intended for any but the poor. Friendly societies will soon be forced to confess that the present system cannot continue, and the sooner they acknowledge it the better it will be for them. Unless they have the wisdom to accept the terms of the Beckenham and Penge doctors, their only resource will be to form, as they threaten, a medical institute.

The multiplication of such institutes throughout the country, though an evil, will be less harmful to the profession than the present club system. Wealthy members, who do not scruple to avail themselves of the services of the present club doctor, who is often a well-known and highly respected practitioner in the neighborhood, will think twice before they employ the new institute doctor, who will necessarily hold a very different rank. Common sense will tell them that good men in the profession are hardly likely to risk ostracism for the wretched payment and degrading conditions offered by the institutes. There can be no doubt that this class of member will soon return to the private practitioner, and pay his fees; but it is to be regretted that through their selfishness many of their poorer brethren, who cannot afford to do so, will have lost forever the services of the old doctors.

[These extracts from the *British Medical Journal*, which is pre-eminently the journal of the profession, show what is being done in that land

to remedy this abuse. When will the profession here cease to be white slaves, stand up for their own dignity, and exact a decent remuneration for their services?—ED. D.M.M.]

THE PREVENTION OF TUBERCULOSIS.

In these days, which almost merit the name of the germ age, when timid reading people would, if they could, have even the air they breathe sterilized, the article by Dr. Holt, on "Tuberculosis in Infancy and Childhood," in the *Medical News*, December 12th, comes almost like a benediction.

The knowledge of the infectious nature of tuberculosis, and its dependence upon a germ, has led caretakers of infants to sterilize almost everything that goes into a child's stomach, sometimes greatly to the detriment of the child's digestion and nutrition.

The evidence adduced seems conclusive that tubercular infection is very rarely produced by alimentary ingesta, and that many of our precautions, so far as tuberculosis is concerned, have been unnecessary, while the real problem of prevention remains unsolved.

Among 119 autopsies on tuberculous children, 66 per cent. of whom were under two years of age, Dr. Holt found that the lungs showed tubercular lesions in 99 per cent., and the bronchial glands in 96 per cent., while in only 37 per cent. were the intestines and in 4 per cent. the stomach the seat of the disease. The lesions of the alimentary tract, when extensive, were almost invariably associated with extensive pulmonary lesions, and were generally secondary to them.

The deductions from his extensive and scientific pathologic observations are, that primary tubercular infection of the alimentary tract is of extreme rarity, and that this rarity is due partly to the power of the tract to

repel, pass on and expel the germs, if ingested, but more largely to the fact that the milk of tuberculous animals is seldom infected and their flesh more rarely still. This observation, if true—and there is no reason to doubt it—is of vast importance, as it removes one of the reasons which have been urged for the sterilization of milk.

While it relieves our minds on one point, it should serve to sharpen our wits to devise methods of preventing infection through the respiratory tract. As is stated, "It is by breathing an atmosphere containing tubercle bacilli that we have hardly made a beginning toward the prevention of tuberculosis. Optimists as we may be, hardly a glimmer of hope is afforded by any plan except a strict quarantine of the tuberculous, including a destruction by fire of all secretions or other vehicles of infection. If a poor, inoffensive leper is known to be at large the people of a whole city shudder with fright and clamor for his confinement, compared to which death would be preferable; but, toward the disease much more infectious than leprosy, and of which about six thousand people die yearly in New York city, the laity are totally indifferent, and the medical profession, as a body, still apathetic.

A persistent and diplomatic campaign of education may do something in the way of prevention; but tuberculosis is on the increase where it has always existed, and has appeared where formerly it was unknown. It has only recently transpired that regions like Colorado and Southern California, where tuberculosis was formerly unheard of, and whose climatic conditions have, in recent years, attracted hordes of tuberculous people, have become infected and now offer no immunity even to natives. This transformation, in the light of our present knowledge, is due to a contamination of that previously pure air by imported infectious material.

If whole regions can be thus

infected, how much easier can public conveyances, public thoroughfares, places of entertainment and worship, workshop and salesroom, hostelry and private house, become the scene of abiding infection. Much would be accomplished if the laity could be brought to a realizing sense of the infectiousness of the sputum; but that is only the first step, and, sooner or later, it will transpire that only by a rigid quarantine can the disease be checked. By no known human means can it be stamped out.—*Med. News.*

SOCIAL PURITY AND MARRIAGE.

By E. S. BULLOCK, M.D., New York.

It seems that new ideas and principles increase in number in a direct ratio to the lengthening age of the world. One which can be referred to the rapid spread of scientific knowledge among the people in general, and especially to the higher education of women, is the growing conviction on the part of the gentler sex that they should not receive into their arms the men aspiring to conjugal felicity who cannot bring to them a guarantee of freedom from diseases which, when existent, may menace the health of the wife and her children, and destroy the happiness which marriage should bring to all who participate in it. That great educator, the modern novel, its co-worker the problem play, and, last but not least, the higher education of women, have all been potent influences tending to take sexual relations from its place among the mysteries of life, from the darkness with which it has always been environed, and allow the clear sunlight of scientific knowledge to shine upon it. Such influences as these are to many maudlin occupants of the pulpit proofs of degeneracy; of what they are pleased to term the

impure spirit of the age. To the calm and careful thinking sociologist they are evidences of a wish to see the question settled. To end controversies is preeminently the spirit of the century in which we live, and what our sexual relations should be is but one of the problems of which we seek the solution. Knowledge is not impurity; innocence which knows not its place in the world is degrading. Normal, healthful sexual intercourse is no more wrong than is the performance of any other purely physical act, and it only becomes wrong when performed in the face of social law. Our social system puts clearly defined limits upon sexual indulgence, and proscribes license. Our intelligent women are waking to the fact that the social law was not made for women alone, but applies in all equity to the opposite sex as well.

A moral nature so finely developed that it will not permit its owner to enter into the marriage state, bearing the seeds of possible direful results to wife and family, is not common among men. Sometimes mistaken and pitiable marriages are the result of ignorance rather than of moral deficiency, but the family physician and the consultant gynecologist are no longer the only ones who know why such and such a wife is an invalid, or why such another one is sterile. Keen sighted women are coming to understand these things. Victims and sufferers, perhaps, themselves, they are rising in defence of the daughter's health and happiness from the results of a life of lasciviousness ante-dating marriage on the part of the man who desires to share the conjugal bed.

From Paris, that star in the firmament of cities, as well as the cloaca of civilization, comes the latest instance of this awakening on the part of thinking women. At a Woman's Congress recently held, resolutions were adopted to the effect that "all families must secure certificates of health from intended sons-in-law, in

order to guard the daughters of the Republic from the risk of contagious or hereditary maladies in the aspiring fathers of a later generation."

Medical men have accomplished much in promulgating the doctrines founded upon their work and study, and the world is bound to awaken to the importance of the subject when it understands that fifteen per cent. of all diseases of women, excluding prostitutes, are caused by gonorrhœa and its sequelæ. Still, and in spite of this, only a small proportion of the credit of educating upon these lines belongs to the medical profession. Medical literature is peculiarly barren of knowledge relating to sexual subjects. Medicine, like parents, leaves this as the one subject to be avoided.

Let us say all we can in encouragement of the women of France in their good work, and extend a welcome to the fast approaching time when the young couple starting out on the way of married life, come to each other with a clean bill of sexual health. It will be one great step toward the future marriage, which, like good life insurance, will be impossible without a certificate of freedom from hereditary or acquired disease.—*New York Polyclinic.*

X-RAY METHOD OF EXAMINING THE HEART.

C. F. Disen, M.D., in *Medical Record*, says: While viewing the pectoral region through the fluoroscope and observing the shadow of the heart, a method of getting a nearly accurate estimation of the size, normal or abnormal, occurred to me. Putting the method in practice, I marked out what should be the normal contour of the heart on the anterior surface of the chest wall. Then I bent a copper wire in the shape of the tracing and affixed it on this with adhesive plaster. Having the patient facing the Crookes tube, I looked

through the fluoroscope from behind between the spine and the scapula, when I plainly saw the wire outlining the shadow of the heart. It may be wondered how the heart can be seen when the soft parts are said to be penetrable by the rays, but the different degrees of penetrability, according to the density of the tissues, enables one to do so. Yet it may be necessary to proceed in a certain way, as at a high power the X-rays seem to dissolve everything, even bone and iron. Using as a generator either a powerful static machine or an induction coil of at least 8" spark, you let your machine work so as to produce the strongest X-rays at your command, when you may see only the scapula, the ribs, the left part of the spine, or the sternum, not to forget—plainest of all—your wire in front. Having familiarized yourself with your landscape, you now very gradually reduce the brightness of the X-rays—in the case of a static machine by reducing the speed—and you will observe the shadow of the heart, extending within or outside your wire. Sometimes you can see a thinner and larger shadow superimposed on a smaller and thicker one, the former representing the heart in diastole and the latter the same in systole. As generally the left line of the heart is all we look for, it may be sufficient for the busy practitioner to affix an almost straight wire, extending from the third to the sixth rib at a proper distance from the left sternal border. Naturally, you may fail to see the heart unless you locate your fluoroscope opposite the organ, which I roughly estimate by marking off a spot to the left of the spine opposite the fourth intercostal space in front. On this mark I centre the fluoroscope. Obvious optical reasons make it preferable to look from behind rather than from the anterior aspect. I think the readers easily will understand my method and find it vastly superior to percussion in giving positive information. Other organs, as

the spleen and the kidneys, are probably explorable in the same manner, and instead of using the fluoroscope pictures may be taken, but the necessarily longer exposure to the X-rays may produce a burn.

CERTAIN FEATURES IN THE PROGNOSIS OF PNEUMONIA.

Dr. Osler, in *American Journal of Medical Sciences*, holds the modern view that the toxæmia is the most dangerous element in pneumonia, and that the interference with respiration and the circulation is of far less importance. "Very large areas of the breathing surface," he says, "may be cut off without seriously disturbing the cardio-respiratory mechanism. In no way is this more strikingly shown than by the condition of the patient after the crisis. On one day, with a lung consolidated from apex to base, the respirations at 60 to 65, the pulse 120, and the temperature between 104° and 105°, the patient may seem in a truly desperate condition, and it would appear rational to attribute the urgent dyspnœa and the slight cyanosis to the mechanical interference with the interchange of gases in the lungs. But on the following day the dyspnœa and the cyanosis may have disappeared, the temperature is normal and the pulse rate greatly lessened, and yet the physical condition of the lungs remains unchanged. We witness no more striking phenomenon than this in the whole range of clinical work, and its lesson is of prime importance in this very question, showing that the fever and the toxins rather than the solid exudate are the essential agents in causing the cardio-respiratory symptoms." He, of course, does not deny that there may be a gradual cutting off of air by progressive consolidation until so little breathing space is left that the patient dies

from suffocation, yet he does not regard this as a frequent cause of death. The compression of the alveolar capillaries by the exudate may also interfere with the pulmonary circulation, yet that it often does so to a fatal degree the writer is unwilling to admit. He refers to the experiments of Welch, which have shown that it is difficult to raise the blood pressure in the pulmonary artery by cutting off much more extensive areas of the circulation than are ever involved in pneumonia. He believes, therefore, that it is to the toxæmia that the excessive mortality from pneumonia is due, and his belief contains for him little that is encouraging, for he confesses that we know of no means by which we may combat effectively the poison of the disease.

THE NEW TREATMENT FOR SPRAINED ANKLES.

In the *International Journal of Surgery*, Dr. Lawrence Crook, of Jackson, Tenn., gives an account of six cases of sprained ankle treated by what has been called "the Gibney method." It is now about three years since Dr. V. P. Gibney, of the New York Hospital for Ruptured and Crippled, advanced, in the *New York Medical Journal*, certain propositions as to this lesion that were in his estimation new, yet reasonable, practicable and worthy of general adoption. "The experience of numerous observers since then has verified his statements, and as one of those who have used his method I am before you to-day to advocate it and prove its efficacy. The treatment, according to Gibney, 'involves no loss of time, requires no crutches and is not attended with any impairment of functions.' The method is as follows: A number of strips of rubber adhesive plaster about nine to twelve inches in length and of appropriate

width, are prepared. I then proceed thus, not following exactly the method of Gibney. Beginning at the outer border of the foot, near the little toe, the first strip partially encircles the joint and ends behind the foot. The second strip is begun on the inner side of the foot and is applied on the opposite side, nearly meeting the first strip behind. Other strips are applied in like manner, each one overlapping the last and crossing its fellow of the opposite side in front, so that the ankle is snugly and smoothly encased, care being taken not to completely encircle the joint with any one strip. After having bound the foot firmly it is well to add one broad strip running around the foot from the internal side of the leg down the internal side of the foot across the plantar surface and up the outside of the leg, 'as much as possible to take the place of the middle rasciculus of the external lateral ligament, which is so often the one most injured.' It is a good plan to place a pad of absorbent cotton over the external malleolus and in the fossa below, to prevent undue pressure and chafing. Any one of the injured ligaments may receive a similar reinforcement from an extra strip. I then apply a roller smoothly over the entire surface, allowing it to remain until the plaster takes firm hold. The simplicity of the strapping treatment, the ease with which it is applied and the immediate and marvellous effect upon the patient can not fail to impress even the most skeptical. Though in direct opposition to the teaching of most of the authorities, it is none the less deserving of attention and application. To judge it by its effects and results, the only just basis from which to deduce a conclusion, we are forced to decide that it is a wonderful improvement over the old methods. The saving of time alone is of great importance in the case of men employed by corporations that pay their employees for time lost when injured; to accident

insurance companies, to whom the saving of time means a saving of many hundreds of dollars in indemnities: and last and best of all, to the patient himself, who can soon resume his work, free from pain and without fear of unfortunate results in the future.

"Case 1.—A male, age twenty-two, was brought in one evening on a litter, apparently suffering great pain and unable to walk. Dr. White, the superintendent, called me in and we diagnosed sprained ankle. Deciding to use the Gibney treatment, the foot was cleansed and the adhesive strips applied as explained previously, reinforced with a roller bandage. The patient was then told to take up his litter and walk, which, after some hesitation, he did, walking out of the hospital with only a slight limp.

"Case 2.—Some weeks ago I was called to attend an employee of the I.C.R.R. who had fallen from the top of a box car, severely spraining both ankles. The injured parts had been dressed for thirty-six hours in lead and laudanum lotion, but were, nevertheless, greatly swollen, discolored and painful. He had them elevated on a pillow when I arrived. I told him I would have him walk about the room in a few minutes, a statement which greatly amused his friends and himself. Shaving the parts and proceeding as usual, I ordered him to arise and walk, allowing him to use his cane. Slowly, cautiously, timidly and fearfully, at first, he placed his feet to the floor, exclaiming: 'Boys, that don't hurt, I can walk,' and he walked about the room several times. Three days later he was on the street telling his friends of the wonderful treatment.

"In conclusion, in the *Railway Surgeon* for January 28th, 1896, there is an article by Dr. A. B. Poore, of Cedar Rapids, Iowa, which is highly commendatory of the Gibney treatment. He reports complete success in every case, and among other things says, after describing the treatment

at length: 'Usually the patient at once makes two comments, that the pain is very much lessened as soon as the strapping is complete, and after he has tried it that he is surprised to know how well he can walk. The average time is so much shortened by this treatment, and the pain is so much less, that the ordinary sprained ankle is no longer a bugbear.' My experience coincides with that of Dr. Poore in every particular."

CASE OF TETANUS TREATED WITH ANTITETANIC SERUM —RECOVERY.

Dr. G. E. Muns, M.D., of Montgomery City, Mo., in *Journal of American Medical Association*, reports the following case:

The patient was a little girl, age five, healthy, history good up to this attack. About ten days before I was called, patient had received an injury of the left thumb from stroke of hammer in cracking nuts. The nail was badly bruised; flesh at base of nail was lacerated to some extent and the nail separated from thumb at its base. The wound healed nicely under local treatment. About ten or twelve days after the injury the parents noticed a change in the child's disposition. She became irritable, would not play, slept badly, ate little and required constant attention. In a day or two these symptoms were followed by stiffness of the spinal muscles and of the muscles of the upper and lower extremities. The muscles of the face were so contracted as to give the child a peculiar expression. When I saw the patient for the first time the symptoms were very much aggravated. Tonic spasms of the muscles of the spine and of the upper and lower extremities were almost constant. The slightest effort to exercise, eat, drink or perform any muscular labor was accompanied

with severe tetanic spasms. The risus sardonicus so common in such cases was a very marked and constant feature. The jaws could not be opened at any time more than half an inch.

Diagnosis was easily made and the case treated for a few days by the ordinary methods of the text-books; but there was no improvement. Obtaining through the Kansas City branch of Parke, Davis & Co. a sufficient quantity of their tetanus antitoxin, treatment was begun two weeks after the first manifestation of the characteristic symptoms. We gave the child five doses of two drachms each hypodermatically about every eight hours. No other treatment was used. We nourished the patient carefully. The symptoms abated visibly in twenty-four hours. The muscular spasms became less and less severe and frequent, until they disappeared.

In this case the remedy seemed to act promptly and favorably, and it may be fairly credited with the favorable result. In the treatment of the case, Dr. W. B. Adams, of Montgomery City, was associated with me, and bears out my judgment of the remedy.

CHEMISTRY OF THE RESPIRATION IN DIAGNOSIS AND THERAPEUTICS.

Robin has been studying for a couple of years the chemistry of the respiration in the normal condition, in infective fevers and under the influence of cold baths. This means of investigating the changes occurring in the organism, has not been utilized to any extent, but Robin considers that he has established its importance and practical value in diagnosis, prognosis and therapeutics of disease. His investigations have been conducted on over a hundred subjects, and with more than a thousand analyses. The points studied were

not only the variations in the pulmonary ventilation, the percentage of CO_2 and of O_2 in the air expired, the respiratory quotient, and the quantities of CO_2 and of O_2 exhaled and absorbed per hour, but also the relations between the weight of the subject during a unit of time (kilogram-minute) and the CO_2 and O_2 as well as the amount of O_2 absorbed by the tissues. It is this last point which he considers of paramount importance as a new indication for therapeutics. The details of his experiments and analyses are given in the *Bulletin of the Académie de Méd.*, October 27th. They prove that the acts of oxidation are defensive processes of the organism in its struggle with bacteria, and therefore that the physician should favor in every possible way the absorption of oxygen in every infection, especially when there are typhoid complications. He made a special study of the effect of cold baths on the chemistry of the respiration, which they greatly accelerate, but their chief value lies in the fact that they promote the absorption of oxygen. To this he ascribes their marvellous effect in infective diseases, which he explains as follows: Cold baths reduce the temperature by diminishing the acts of hydration and segmentation, the first stage in cellular disintegration, and of the production of certain toxins which are important sources of febrile elevation of temperature. Cold baths also exaggerate the processes of oxidation, which transform the bacterian toxins and those which develop in the course of the morbid disintegration of the tissues into soluble products, easily eliminated and but slightly toxic. They also increase the arterial tension, invigorate the action of the heart and increase the diuresis, thus facilitating the sweeping out and expulsion of the waste products. These effects are accomplished through the mediation of reflex action on the nervous system, as is proved by the increased

proportion of phosphoric acid in the urine to the total amount of nitrogen. The larger amount of oxygen absorbed by the tissues while under the influence of cold baths, seems to be one of the means by which the economy promotes the processes of oxidation. When cold baths do not promote respiratory changes, they are useless, and a chemical study of these changes will determine henceforth the cases in which they are beneficial and those in which they are not, which will prove an important factor in the prognosis.

THERAPEUTIC NIHILISM.

Because the medical man in this age refuses to order the old-time condition powder or the veterinary bolus over which our fathers gagged, must he be dubbed a therapeutic nihilist? If the physician, enlightened by experience at the bedside and at the autopsy table, fails to believe in the advantage of large doses of digitalis in well compensated lesions of the heart, or of concentrated solutions of iodide of potassium given internally to absorb the connective tissue in the form of advanced Bright's disease in which the kidneys are contracted, must he be called a medical "do nothing"? Even if he prefers to restrict his drug prescriptions for human beings to a comparatively small list of chemical substances whose favorable action has been completely demonstrated, and to reserve his experiments with untried poisonous alkaloids for laboratory animals, is he to be decried as an enemy to the profession and to the public weal?

We believe that the majority of our readers will agree with us if we answer in the negative. If to withhold drugs when they are likely to do harm, or even when we have no sufficient evidence that they will do good, trusting in such cases rather to the reparative powers of Nature herself, be therapeutic nihilism, then let such

nihilism prosper. The well judged rejection of certain drugs is as important for modern therapy as is the studied rejection of phrases by the cultured writer.

As a matter of fact, therapy has recently made enormous advances—advances more extraordinary than the sanguine expectant of thirty years ago could have hoped. While it is true no small part of this advance has consisted of negation and of prevention, still the lion's share of progress has been made up of positive additions to our therapeutic stores. As a result almost entirely of animal experiment we have been given, for example, a sero-therapy and an organo-therapy, which, though the germs of the treatment are perhaps recognizable in the habits of a Mithridates and the concoctions of the world's witches, come to us now for the first time physiologically well based.

As might have been expected, however, the phenomenal results obtainable by the legitimate use of serum and of thyroid extract have led the impatient and the untrained to employ all manner of serum and powdered organs in a whole host of affections, often in as reckless and unscientific a manner as that which characterized the indiscriminate administration of drugs and alkaloids of the period immediately preceding this. With every new harvest of rich grain we gather also a wilderness of weeds. Truly the fresh perfection treads close, very close, upon the heels of the therapeutic past; the old darkness is difficult to dissipate, the shapeless chaos unwilling to be ruled.

It is only very slowly that we have learned that the body of man in its long struggle with environment has developed chemical mechanisms of defence, of a complexity in comparison with which the profoundest subtleties of the organic chemist are but the simplest prolegomena. Several thousands of years of experience have been necessary to convince us that

fresh air, the light of the sun, good food, sufficient quantity of sleep, and suitable alternation of rest and activity of all the organs of the body, are the agents which more than all others are effective in the maintenance of health, and in its restoration when the body is diseased. All medical men tacitly acknowledge these truths, but to few, very few, do they have full, vital meaning.—*Maryland Medical Journal.*

PHARYNGEAL COUGH IN CHILDREN.

M. René Millon gives the following description of a cough rather frequently met with and which often causes errors of diagnosis. The cough is harsh and occurs in successive, but comparatively rare, attacks, which come on at certain times, accompanied by an accumulation of mucus in the back part of the throat, and sometimes giving rise to nausea. The attacks are generally violent. The cough is sometimes barking, but always moist. The paroxysms are not very long, but merge into each other, especially at night, to last ten or fifteen minutes. They occasion congestion of the face and lachrymation. They are more frequent by night than by day, but generally begin in the day when the child is active in play, when he cries, or is angry. At night the paroxysm occurs in three well-defined periods,—upon first lying down, at midnight, and upon waking. These three attacks do not always happen. Many patients have but two; the most frequent is that upon waking. The evening attack comes on a few minutes after the child has gone to bed—that is, while in the horizontal position. In the morning it begins immediately after the child awakes or while he is being dressed. The midnight attack, of much interest on account of its frequent punctuality, does not awake the younger patients, but arouses the older ones, who are

then often obliged to sit up for several minutes.

This cough is accompanied by expectoration. The word is in these cases doubly incorrect. In the first place, etymologically, because the mucus is derived from the pharynx, and not from the breast. Secondly, in the proper sense of the term, because the child, as a rule, does not know how to expectorate. We should rather say that the cough produces in the throat glairy mucus which, in the case of the younger children, can be removed by the fingers or a brush and which the older may spit out, but which is generally swallowed. The sputa are long, thready, and viscid, sometimes thick when the lesions are of some duration. When the fits of coughing are long and violent the mucus may be stained with blood. In some patients, also, the paroxysmal cough excites nausea, and, if food has lately been taken, may cause vomiting, and thus the hard, paroxysmal cough, accompanied by the rejection of mucus and food, closely resembles whooping-cough. The manifestation is, in most cases, persistent and rebellious to all methods of medication except local treatment. The cough has no effect upon the general health.

The symptomatic complexus is marked by two peculiarities: (1) absence of tracheobronchial stethoscopic signs; (2) a particular condition of the pharynx, in which are found the habitual lesions of chronic pharyngitis. A diagnosis must always be made between pharyngeal cough and pertussis. The treatment is that of chronic pharyngitis.—*La Médecine Moderne*.

ETIOLOGY OF ALIMENTARY GLY-COSURIA AND DIABETES.—Strumpell (*Berl. klin. Woch.*) says that the problem of diabetes must remain unsolved so long as it is unknown how the sugar molecule is destroyed in the body. The normal capability of the

individual to burn up sugar is not an unlimited one. If more than 200 g. of grape sugar is introduced into the body glycosuria appears, but there are variations in this limit even in healthy individuals. Alimentary glycosuria does not depend solely on the amount of sugar introduced, but also on the rapidity of absorption. The author has investigated this question of alimentary glycosuria, more especially in such general conditions of the body as are known to be in relation with diabetes rather than in actual visceral disease. In those suffering from marasmus in consequence of old age, etc., also in anæmia, a moderate amount of sugar given by the mouth (100 to 150 g.) did not produce glycosuria. In two patients with gout, where metabolism is known to be diminished, the results were negative. In three cases of severe muscular atrophy no alimentary glycosuria could be thus induced. This fact is interesting in relation to the view that the greatest part of carbohydrate metabolism occurs in the muscles. In patients with arterio-sclerosis doubtful results were obtained. Slight forms of diabetes are noted in arterio-sclerosis, and yet the explanation is not clear. In the neuro-asthenical positive results were so often found as to be of practical value, especially in the question of the so-called traumatic neuroses. The most undoubted results were obtained in the alcoholic, and especially in beer drinkers. The author has frequently found alimentary glycosuria in these cases. With the beer a large quantity of carbohydrates are introduced into the body. In discussing the etiology of diabetes the author divides the causes into exogenous and endogenous. If the hereditary predisposition is very great, then the disease may appear without the intervention of other causes. It is probable that a large number of the cases of diabetes, especially in the comparatively young, belong here; no other cause can be found on the most rigorous inquiry.

Diabetes sometimes occurs along with other endogenous disease, and the author refers here to cases associated with spinal muscular atrophy and acromegaly. The possibility of external causes must not be overlooked. In addition to trauma, overstrain, excitement, acute illnesses, syphilis, etc., the author draws attention to the frequency with which he has observed diabetes in beer drinkers. The cases were generally of a mild variety, but also dangerous through possible complications. Other diseases usually referred to beer drinking may coexist. Alimentary glycosuria is frequent in these individuals, and no sharp line can be drawn between this condition and true diabetes. There hardly appears to be any other external cause (except certain other poisons) which interferes so much with destruction of sugar in the body as long continued excesses in beer drinking. The relation of this fact to prophylaxis and dietetic treatment is obvious.

—

RIGORS IN CHILDREN.—Slight chilliness or coldness of hands and feet is very frequent in children. It may be due to imperfect protection of the body by under clothing or outer clothing. It may be a sign of some indigestion process, apart from exposure to cold. Fully developed rigors, on the contrary, as in the adult where the skin becomes anæmic and wrinkled (goose-flesh), the teeth chatter and the temperature shoots up, are very rare in children. This is so well known that in suspected malarial attacks we do not look for the chill as an important diagnostic point. With reference to rigors in "septic" infections, Dr. Baldwin (*Lancet*, June 13) presents some interesting statistics from the surgical wards of a great London child's hospital. In adults suffering from surgical troubles the onset of rigors is one of the alarm signals indicating that trouble is brewing. In abscesses and wounds

they almost certainly indicate that the blood stream is becoming infected by septic matters from the ailing part. In children, on the contrary, this danger signal is almost always wanting, and if present it may not indicate exactly the same complication as in adults. In septic abscesses, many of which were recorded, some with general pyæmia, rigor was almost wholly absent. In fourteen cases of cellulitis, many of them presenting other plain septic symptoms, no rigors were noted. In three cases of empyema no rigors were mentioned. In twenty-one cases of acute epiphysitis, twelve of them fatal, nothing is said of any rigors having occurred. The above records seem to have been kept with care, as shown by their fulness in regard to other details. It is also worthy of note that convulsions, which so often in children replace the ordinary danger signals (subjective) of the adult, did not with any frequency take the place of rigors in these cases. The paper of Dr. Baldwin contains many other details of value concerning this diagnostic symptom, among others, records which show its unreliability (according to adult standards) in suppuration of the middle ear and mastoid with threatened lateral thrombosis.—*Maryland Medical Journal*.

—

LITHIA WATER.—Few persons like to have their idols shattered and their fine dolls turned to sawdust. Dr. Chas. Harrington, of the Harvard Medical School, who some years ago showed the true value of the so-called diabetic bread and flour, now strikes a blow at the various lithia waters and goes on to show that lithia itself plays a very small part in the good effects or supposed good effects of this pleasant medication. Dr. Harrington states in the *Boston Medical and Surgical Journal* that he went out into the open market and bought several varieties of lithia water as put up by firms whose wares are made well-known

through broadcast advertising. These waters he carefully analyzed. It would hardly be necessary to go into the exact course of analysis which the author pursued, but suffice it to say that of three of the lithia waters, which are household words and used by physicians and laymen alike, he found in two absolutely no lithia at all, in the third such small quantity that the good effects of the water could hardly be traced to this salt. All three of the waters were clear, colorless and odorless, but two of them by reason of their excessive hardness were not to be recommended for general household use, and while the third was a good water for domestic use, none of them had any special medicinal value. These waters may not do what their owners claim, yet at the same time they are of great benefit, because when a person is put on a course of water, whether by his physician or with the suggestion of a friend, there is usually accompanied with this prescription the injunction to eat sparingly, take no alcoholics and lead a regular life with plenty of sleep. Such a course with any kind of water would likely effect a cure in most cases. Too many persons, as a rule, do not drink enough water to flush out the waste materials of the body and if the prescribing of supposed lithia water makes a man drink plenty of good, pure water and abstain from many things that are harmful, then let what you please have the credit, but rejoice in the cure. Dr. Harrington's work carries with it a conviction that he is honest and not writing for spite or in favor of any person or persons. Many physicians in prescribing lithia water usually advise the addition of some salt of lithia to the water, but few persons would have believed that two of the best known lithia waters contained absolutely no lithia at all. Therefore, to pay twenty cents a bottle for what may be obtained for much less is a species of faith cure, but if Dr. Harrington's conclusions

are correct the transaction is hardly to the credit of the wealthy spring owners.—*Maryland Medical Jour.*

ACROPARÆSTHESIA.—This is the subject of a thesis by Chabot (*These de Lyon*, 1896), in which he draws attention to this somewhat obscure affection. Acroparæsthesia is most common in women from forty to fifty years of age, who, on account of their employment, are obliged to put their hands in cold water or to perform delicate and prolonged actions, such as sewing or knitting. The principal phenomena are subjective, and are described as tingling with a certain amount of stiffness in the extremities or a dull pain. A sensation of numbness may be one of the most important symptoms, and may possibly precede the others. It may first appear in the fingers and then spread to the whole hand, the forearm, the arm, the shoulder, and even as far as the lips. In some rare cases the lower limbs may also be involved; but, as a rule, the altered sensations are confined to the hands or even a portion thereof, and do not exceed these limits. In more marked cases there may be a sensation of burning, pin-pricking, or even crushing, and in others the fingers may feel absolutely dead. On examination there may be objective signs of vasomotor disturbance, alteration in sensation and temperature; thus there may be abnormal pallor of the skin going on to a chalky whiteness, or even a swelling with dilatation of the veins. In other instances there may be a very faint bluish tint. There seems also at times to be a diminution in sensibility. All these phenomena are liable to progress, being at first merely remarked in the morning, while later they are equally common by day and by night. It is sometimes merely sufficient for the patient to put the hands in cold water, or try to pick up some small object, or to perform some delicate action, for all the symptoms to appear. In a few rare cases the disease

begins suddenly, almost immediately reaching its acme, and not afterwards progressing. There does not seem to be any motor derangement. Warmth always seems to allay the symptoms. The patients do not seem to present any trophic alteration or electric abnormality. The author states that the disease may last for years in a mild form, but that, sooner or later, it becomes more marked, and at the end there may be very severe suffering, more particularly in winter. The nature of the disease is very obscure, and its position seems to be close to local asphyxia. Warmth, bromides, and galvanic currents have constituted the best treatment in the author's hands.

—

PRELIMINARY NOTE ON BLENNO-STASINE.—(By Walter F. Chappell, M.D., Surgeon to the Manhattan Eye, Ear and Throat Hospital,) Blennostasine, although somewhat analogous to quinine, is without many of its unpleasant qualities. The drying or blennostatic effect of this remedy has suggested the name, which is more convenient than the chemical designation. The compound is a derivative of one of the cinchona-bark alkaloids and is a solid substance which crystallizes from dilute solutions in large, prismatic crystals, or from dilute solutions in the form of small, needle-shaped crystals, very soluble in water and quite as bitter as quinine. Blennostasine may be administered in capsule form, when combinations are required; but for many reasons one-grain gelatine-coated pills are preferable. The dose ranges from one to four grains or more every hour, according to the effect desired. It has a marked contractile effect on the vasomotor system of the upper respiratory tract, and, being non-toxic, is especially valuable as a substitute for belladonna, atropine, and similar drugs in hay fever, acute influenza and rhinitis; also in intermittent rhinorrhœa, laryngorrhœa and bronchorrhœa. It has a

powerful sedative influence on the brain and spinal cord and markedly diminishes reflex movements. During the past two years the writer has employed many of the alkaloidal salts from cinchona in hay fever with only partial success, but during the past season blennostasine has replaced these and other internal remedies with gratifying results—in fact, all hay-fever patients who have taken the remedy have been promptly relieved, and, though a recurrence of the symptoms next year may not be prevented, the usual attack may be aborted if the treatment is begun sufficiently early. Quinine is very popular with the laity for colds in the head and influenza, but it only modifies the symptoms and is rarely curative. The salt blennostasine has medicinal properties superior to those of quinine for arresting super-secretion, and if given frequently and in sufficient quantities will almost invariably arrest the sneezing and the mucous discharges of ordinary influenza colds. Hyperæsthetic conditions of the nasal mucous membranes are very favorably influenced by it, and one case of spasm of the glottis which had become very alarming, owing to the quantities of mucus which collected at night, was controlled by this drug.—*New York Med. Jour.*

—

TETANY FOLLOWING SCARLATINA.—J. B. McConnell has reported (*Mont. Med. Jour.*) a case in which well-marked tetany came on, while the child, a boy aged 5½, was doing well on the eleventh day after the commencement of an attack of scarlet fever. There was a neurotic family history, the patient had suffered frequent attacks of convulsions during the period of dentition, and had an attack of tetany at the age of 1½ year. The fingers were flexed at the metacarpo-phalangeal joints, the hands were flexed on the arms, the elbows flexed slightly. The feet were

in the equino-varus position. The wrists and ankles were swollen and tender, and the skin over them red. The temperature was 101° F. Mechanical irritation of the nerves of the affected parts increased the contractions. Facial irritability was not present. Under treatment with sodium bromide and salicylate and potassium carbonate, the condition began to improve on the second day, and at the end of a week all the symptoms had disappeared. Commenting on the pathology of tetany, McConnell suggests that the recent views of Dercum, Wiedersheim, and others as to the mobility of the neurons (see *British Medical Journal*, October 31st, 1896, p. 1311) may throw light upon it. If the neurons, whether peripheral, cerebral, or in the cord, can separate so that one is isolated from the other in the various nervous arcs, he argues that it is possible that a tetanic condition may be kept up by an abnormally continuous approximation of associated neurons.

INSUFFICIENCY OF THE BACTERIOLOGICAL DIAGNOSIS OF DIPHTHERIA.—Spronck (*Sem. Med.*) points out that although a bacteriological diagnosis of diphtheria is very easily and certainly arrived at, nevertheless cases exist in which bacteriologists disagree. Cultivation on serum, followed by microscopic examination, shows that there are three varieties of diphtheria bacillus. On serum these are differentiated only by size; the short bacillus, however, closely resembles the pseudo-diphtheria bacillus described by German authors. As regards virulence, the short bacillus is regarded as extremely benign, the intermediate as less so, and the long bacillus as the most toxic of all. It might be thought that the small bacillus described by French writers was identical with the pseudo-bacillus of German authorities, but doubt is thrown on this by the results of experiments on guinea-pigs. Though benign, the small bacilli in cases

under observation differed in their degree of benignity, though none of the animals affected died. The cultures used were in all cases pure. To determine whether or not two pathogenic specimens were true diphtheria bacilli, recourse was had to antidiphtheria serum. If the true diphtheria bacillus had been present, this should have been capable of protecting a guinea-pig from ill-effects. This was not found to be the case. Spronck concludes that there exists a pseudo-diphtheria bacillus, which is pathogenic to guinea-pigs, hitherto unknown or mistaken for the short bacillus. Researches on the but slightly pathogenic pseudo-diphtheria bacillus showed that in time the cultures lost their virulence, and when spontaneously attenuated, could not be distinguished from von Hoffmann's pseudo-diphtheria bacillus. This proves that the relationship said to exist between the latter and the diphtheria bacillus cannot be admitted without reservation. Probably von Hoffmann's bacillus is derived sometimes from the true diphtheria bacillus, at other times from a slightly virulent pseudo-diphtheria bacillus. It seems justifiable to think that microscopic examination of the colonies is inadequate, and it is necessary to control the diagnosis by the experimental use of anti-diphtheritic serum. —*Brit. Med. Jour.*

RADICAL CURE OF HERNIA.—Duplay and Cazin (*Sem. Med.*) describe an operation for the radical cure of hernia, in which buried sutures in the parietal tissues are done away with. Twenty patients were operated on, and all recovered without complications of any kind. Ligature of the hernial sac was abandoned, and the following method was pursued: The sac was completely dissected out, the peritoneal layer alone being taken. This was pulled out until parts normally 2 or 3 cm. above the inguinal canal were exposed. The sac was then tied in a

knot as near its base as possible. Several knots were tied where length permitted, and the remainder of the sac split in two, and the strips tied together. Lastly, to ensure absolute firmness a hole was made in one strip, and the other strip passed through it, and this was repeated as often as possible in both strips. When the sac was short one knot was tied, and the ends split and tied together once or twice. The tying was easily done by means of forceps. When the sac was released it disappeared into the abdominal cavity, and, in all cases operated on, could be felt 3 or 4 cm. above the internal ring. In two cases of old-standing herniæ with thickened sac the entire sac was split at once, and the ends tied together; in one case the sac was split into four, and the ends tied two and two. The results were equally good. Herniated omentum was resected where necessary, and sutured with silk sutures, as these when left in the peritoneal cavity do not give rise to the remote ill effects of sutures buried in the abdominal walls. Ligature of vessels was never necessary. The pillars were approximated by means of silver wire sutures comprising as large a quantity of the soft parts as possible. The cicatrix was in every case firm. No post-operative complications had resulted in the majority of the cases which were seen at varying intervals from six weeks to six months afterwards.

TREATMENT OF ECLAMPSIA.—Halbertsma (*Wien. Med. Woch.*) attributes the differences of opinion in respect of the treatment of eclampsia to comparison of the number instead of the nature of cases. The prognosis varies greatly with the time at which the symptoms come on; remedies which are effectual in post-partum eclampsia are useless when the manifestations appear towards the end of pregnancy. It is with the latter class of cases that the author particularly deals, and of them

he analyses forty-eight—thirty occurring in the latter period of gestation, the other eighteen at the beginning of labor. Of these forty-eight cases the prognosis in twenty-six was extremely grave; ten of them were actively treated, the remaining sixteen not. Of the former recovery resulted in eight instances, of the latter in only one. This corresponds to the results recorded by Zweifel, who, out of twenty-two actively treated severe cases lost but two. Halbertsma hence considers that such cases occurring in the last three or four months of pregnancy or at the beginning of labor indicate more radical treatment than is commonly employed. Active interference is required in all cases where the pregnancy has lasted eight months, and in all others in which two doses of 1-30 gr. of morphine have proved ineffectual. In such circumstances the prognosis is much worse if the patient is left alone than if Cæsarean section is performed; by the procedure the author reckons usually to save both mother and child. Doderlein has published nineteen cases so treated; in eleven success was complete, in the other eight the mother died. In two of the fatal cases the eclampsia was complicated by apoplexy and miliary tuberculosis respectively, while three were in extremis when operated upon; the number of instances in which the operation failed to avert a fatal issue is thus reduced to three. Since Doderlein's paper, out of three cases treated by Halbertsma's method, two have recovered. Duhrssen prefers to operate by deep incisions into the cervix, but this results, according to Zweifel's statistics, in an infantile mortality of sixty-one per cent., so that the author prefers Cæsarean section whenever the cervix is not dilated. Whatever view may be taken of the pathogeny of eclampsia there is no doubt of the causal relation of pregnancy, and the first indication in a dangerous case is therefore to terminate this condition.—*Brit. Med. Jour.*

EUCAINE A SUBSTITUTE FOR COCAINE.—De Mets (*Belg. Med.*) has made comparative trials of eucaine and cocaine upon healthy eyes, using a two per cent. solution of the hydrochlorate in each case. Eucaine is a derivative of cocaine, and occurs as a white neutral bitter powder, soluble in water, and not decomposed on boiling. Hence its solutions can be sterilized, an advantage which cocaine does not possess, since its solutions are modified and rendered less active by this treatment. The instillation of it is a little more disagreeable than that of cocaine, the smarting is greater and lasts longer. It does not produce the marked vasoconstriction of cocaine: thus the eye, instead of becoming white as if frozen, is usually slightly injected. When with cocaine the ocular conjunctiva becomes exsanguine and the eyeball is projected forward, the pupils being widely dilated through suppression, at any rate to some degree, of the lid reflex, anæsthesia is at its maximum and the moment for operation has arrived. With eucaine the eye preserves its normal aspect, and the palpebral chink remains invariable without forward protrusion of the eyeball; anæsthesia to pain is produced at least as strongly with eucaine when tactile sensibility appears less affected. Its action is first manifested seven minutes after instillation; it lasts twenty to thirty minutes, the maximum being reached at about fifteen minutes. The author considers its anæsthetic action strong and sure. It does not produce mydriasis; hence it is valuable in cases of operation for glaucoma, where the mydriasis of cocaine is inconvenient. De Mets finds a mixture of three parts eucaine to one part cocaine, of whatever strength, very useful. It is superior to cocaine in affections of the throat and nose, it being far less toxic as regards the heart and circulation; and it is indicated in dentistry because it does not produce an infiltration and œdema like those of cocaine.

This absence of toxicity must also be considered as regards ophthalmic surgery. Besides corneal ulcerations other more grave and even fatal sequelæ have been recorded after cocaine instillations.

A PLAUSIBLE DEDUCTION.—The "substitutor" employs a young man, sometimes his own son, to learn the drug business. The young man is also taught substitution, which prevents him from ever becoming a good druggist. What does it do? Why, it gives the young man his first lesson in dishonesty! The young man knows this and would like to say, "Mister, please don't teach me dishonesty; I want to learn the business right." If he does this he will lose his position. Generally he says nothing and gradually acquires the methods of his preceptor. If the young man happens to be the preceptor's son, he always does as "papa" tells him. By and by when the young man gets "smart," like his employer, temptation presents itself, and being a little short of spending money, he says to himself, "Guess I'll just pocket this quarter. The boss is robbing the Antikamnia people and his customers every day. 'Sauce for the gander.' This marks the beginning. The next day the young man is not satisfied with one twenty-five cent piece. No—his appetite gets abnormal, just like the substitutor's. The end of the young man's career is: discharged for stealing—stealing from the man who educated him to be a thief. Moral: Do unto others as you would have them do unto you.

TEMPERATURE AS AN ELEMENT IN PROGNOSIS.—Dr. John Shrady, of New York County, at the New York State Medical Association, spoke of the accuracy of the temperature record, as compared with that of the pulse and respirations. It therefore

furnished the physician with more reliable information than the other vital signs did, but the temperature record, as an index of the problems of waste and supply, should be ever considered in the light of sex, age, temperament and environment. A high temperature was not necessarily a signal of danger—a temperature of 106° F. on the second or third day of catarrhal pneumonia was not so grave as a temperature of 105° F. in the second or third week of typhoid fever. Da Costa had reported a recovery in a case of cerebral rheumatism after a maximum axillary temperature of 110° F. A temperature of 96.5° F., he said, was the rule in shock, apoplexy, diabetes, tuberculosis, peritonitis, cholera and pulmonary embolism. In the prognosis of all these conditions there were no embarrassments, for the *finale* was not long delayed, and was sure to be gloomy—the fires were low and smoldering. His conclusions were: 1. That high temperatures were not so uniformly fatal in their tendencies as low temperatures. 2. That a high temperature of short duration was simply indicative of an acute infection or of some insignificant disturbance. 3. That a subnormal temperature, as a rule, presaged death. The greatest disappointments were the rule in cases of collapse.—*N. Y. Medical Journal.*

EMETICS.—In pædiatric therapeutics emetics have fallen into undervalued discredit, and as a consequence stomach-washing has grown into favor. This latter plan is no more effectual, is attended by considerable difficulty, and is not entirely free from danger. Over-eating is a frequent condition, and for it small doses of calomel, followed, if necessary, by a cathartic, are in favor; but an emetic with copious draughts of lukewarm water will do the work at once. I have so often seen school headaches treated by bromides that it seems to me we have drifted from all therapeutic principles. Non-depressing

emetics are of great value in preventing atelectasis in infantile bronchitis and in pertussis. Turpeth mineral answers the purpose so well, and the dose required is so small and convenient, that it has supplanted all other irritant emetics. In catarrhal laryngitis and tonsillitis cynanche, nauseant emetics are indicated, but syrup of ipecac should be discarded as slow, uncertain, and ineffectual: the wine is made from the fluid extract, and can be depended upon. Antimony should be banished from the nursery, although in children it is often more beneficial in controlling brain symptoms in meningitis, and such inflammations as orchitis and parotiditis, than either aconite or veratrum. A good plan is to give $\frac{1}{200}$ to $\frac{1}{150}$ grain every half-hour until slight nausea is produced.—*Pædiatrics.*

GONOCOCCUS AND MENINGOCOCCUS.—Kiefer (*Centralbl. f. Gynak.*) demonstrated in June, before a German Society, the strong resemblance between the gonococcus and the diplococcus intracellularis, the germ found in epidemic cerebro-spinal meningitis. Specimens of the latter were procured from the spinal canal of a case of meningitis and also from a case of pure rhinitis caused by bacteriological examination of the diplococcus of meningitis. The germ is clearly an active promoter of suppurative inflammation of mucous membranes. It grows freely in glycerine agar, in which it can be cultivated with ease. The gonococcus does not readily propagate in that medium. Hence Kiefer suggests that many cases of purulent discharge from the mucous membrane of the mouth and nasal fossæ in children hitherto attributed to the gonococcus are really set up by the diplococcus of meningitis. The glycerine agar test is necessary in order to distinguish the two germs, so closely do they resemble one another in microscopical appearances.—*British Medical Journal.*

COCAINIZATION.—Reclus has a record of 3,500 successful cocainizations, and always administers it to the patient in a reclining position, retained until after he has eaten something. He also uses a hundredth solution in all cases, and never allows it to be injected into a vein, nor in larger quantities than 12 to 15 centigrammes. He states that cocaine allows important and delicate operations to be performed almost without assistance, and without the loss of time, the annoyance and the dangers of chloroform. He considers its use indicated in the removal of subcutaneous tumors, in incising an abscess, in ingrown nails, amputations and disarticulations of the phalanges and metatarsus, in herniotomy, in the radical cure of hernia and hydrocele, in anal dilatation, circumcision and castration, in opening abscesses and hydatid cysts of the liver, and in making an artificial anus. The long duration of the anæsthesia is a point in its favor; the skin can be sutured without pain even after an operation that has lasted twenty to twenty-five minutes. If the above simple rules are followed, there need be no fear of syncope, which is the fault of the administrator and not of the cocaine. The reclining position is imperative.

—*Revue Int. de Méd. et de Chir.*

PRACTICAL TREATMENT OF TYPHOID FEVER.—Dr. C. E. Skinner writes as follows in the *New York Medical Journal*, October 24th, 1896: "It is a prevalent notion that a too rapid return to a solid from a liquid diet is capable of inducing a relapse of the disease. I do not believe this. This fever is infectious, and if, in any given case, it started to run another cycle, there must certainly have occurred another infection with fresh germs. It is much more logically explained by the probability that the fæces had not been thoroughly disinfected early enough, to kill all the micro-organisms, and that some article—clothing, bedding, or the carpet, for

instance—had suffered contamination. As their virulence is not destroyed by drying, it would be quite possible for some of them to effect a re-entrance into the patient's intestinal tract and set up mischief anew. Too heavy (*i.e.*, indigestible) a diet would be likely to produce acute dyspepsia, with its accompanying systemic disturbances, and this would be rendered more intense and easier of induction by the debility present; but I do not believe that it ever directly caused a relapse into true typhoid fever."

CHOLAGOGUES.—Dr. E. Stadelmann (*Berliner klin. Woch.*) thus classifies the so-called cholagogues: 1. Substances having no true cholagogue action: bicarbonate of sodium, chloride of sodium, sulphate of sodium, etc. 2. Drastic substances, having no assured cholagogue action and often diminishing the biliary secretion: gamboge, jalap, aloes, scammony, senna, calomel. 3. Substances diminishing the biliary secretion more often than they increase it: alcohol, olive oil. 4. Substances certainly diminishing the biliary secretion: atropine, pilocarpine (?). 5. Substances having a doubtful cholagogue action: antipyrin, acetanilid, caffeine, diuretin, santonin, Durand's remedy. 6. Substances which are cholagogues: salicylate of sodium, bile.

AFTER-PAINS.—Dr. Winterburn (*Journal of Obstetrics*) says that in many cases a nice warm meal is better than any medicine; but, when pains are exhaustingly severe, he uses amyl nitrite. This potent drug is a very efficient controller of after-pains, and, used with caution, it need not result harmfully. A neat way of using it is to saturate a small piece of tissue paper with five or six drops, stuff this into a two-drachm vial, and request the patient to draw the cork and inhale the odor when she feels the pain coming on. It acts with magical celerity.

NECESSITY OF STRICT DIETING IN SKIN DISEASES.—Brocq (*Journal de Med. et de Chir., Med. and Surg. Reporter*) insists that not only are there certain kinds of food which provoke immediate eruptions of the skin, but that others act with a more delayed effect. It is generally easy to obtain from a patient a promise to abstain from food that produces ill effects, no matter how pleasing it may be in taste, if these effects are immediate, but when the effects become apparent only after the lapse of considerable time, as in gout or rheumatism, it is hard to obtain such a promise. Yet it is reasonably certain that effects upon the skin are often produced as remote in time from the ingestion of the deleterious articles of food, as in the case of these two named diseases, although, unfortunately for science, this remote effect is denied by the majority of dermatologists. It then seems logical to advise arthritic people to observe a strict diet if they wish to avoid annoying eruptive attacks. They should particularly abstain from coffee, liquors, wine, beer, dark meats and acid vegetables and fruits. Persons affected with acne must avoid salty cheese, preserved meats and fish. These precautions must be particularly observed when an attack is imminent, because of development of the morbid predisposition. The articles of food mentioned can play a role of accidental cause under these conditions and have an immediate pathological effect.—*N. Y. Med. Times.*

CANCER AND HIGH FEEDING.—It appears from the last issued report of the Registrar-General that the proportional mortality in England from cancer is four times greater than it used to be half a century ago. A remarkable decline in the death rate from phthisis and tuberculous disease has coincided with this great increase in the cancer mortality, hence there is some truth in the curious paradox that a high cancer mortality is an

indication of good sanitary conditions. No single factor is more potent in determining the outbreak of cancer in the predisposed than high feeding. The gluttonous consumption of meat, which is such a characteristic feature of the age, may be regarded as especially harmful in this respect. Statistics show that the meat consumption in England has now reached the amazing total of 126 pounds per head per year. When excessive quantities of such highly stimulating forms of nutriment are ingested by persons whose cellular metabolism is defective, it is likely that it may excite in those parts of the body where vital processes are still alive, such excessive and disorderly cellular proliferation as will eventuate in cancer. No doubt other factors co-operate, and among these may especially be mentioned deficient exercise in the open air.—*N. Y. Med. Times.*

INJECTIONS OF IODINE IN SURGICAL TUBERCULOSIS.—Campanini (*Il Policlinico*) gives several examples of the results of Durante's method of treatment in various cases of surgical tuberculosis. The author gives details of two cases of tuberculous joint disease—in one fifty-three injections, some intraarticular and some intramuscular; in the other forty-five injections were given. In each case a cure was effected. In tuberculous glands, especially if unassociated with a suppurative peradenitis, the iodine injections gave good results. Two cases of tuberculous peritonitis were treated with decided advantage by the same method. In addition to the above the author also practised Durante's method in two cases of lupus and one of tuberculous orchitis and epididymitis. Time alone can prove whether relapses occur with less frequency after the iodine treatment, but as far as he has tried it the author speaks strongly in favor of its trial in suitable cases.—*British Medical Journal.*

DISPENSING CALOMEL WITH SUGAR OF MILK.—For years all of us have dispensed calomel, together with “cane sugar,” in the form of powders, and no fault may have ever been found with this combination. Within the last few years it has been found by many of our physicians to be necessary to follow the “progressive line”—that is, to change the “old-fashioned” cane sugar to milk sugar, in the case of admixture with calomel, and even with more delicate and more easily decomposable chemicals. “Milk-sugar fame” came from abroad, and we here naturally ape European fashion, whether rightly or wrongly. In my experience calomel and milk sugar, safely esconced in a good powder paper, as is the common practice among pharmacists, will not keep so long as a mixture of “cane sugar” and calomel, without showing signs of decomposition (turning gray). This is generally not noticed, because of the large quantity of sugar of milk present, the excess hiding the discoloration: but when, as in my store it is often the case, small amounts of sugar of milk are wanted with calomel, so that the powder can be placed dry upon the tongue or into the mouth of a small child, the metamorphosis of the calomel can be easily noticed before the administration of the dose.—*Drescher Med. Rec.*, 1896, L, 303.

THE TREATMENT OF SCIATICA BY COMPRESSION.—According to the *Bulletin Med. de Paris* (*N. Y. Med. Jour.*) M. Negro has reported 113 cases of rebellious sciatica in which the above treatment has resulted in recovery. The procedure is as follows: The patient lies on his face with his legs extended and resting easily one against the other. The most painful spot is selected—the region where the nerve proceeds from the large sciatic opening. On its trunk both thumbs are applied and it is compressed with the greatest possible force. At the same time

slight lateral movements are made without changing the point of pressure or moderating its intensity. This takes from fifteen to twenty seconds, and is followed by an interval of twenty minutes' rest, when the procedure is repeated. After a second application, which is much less painful than the first, the patient is able to walk, and for several hours, or even a day, he may be free from pain. In order to obtain complete recovery, says the author, this procedure should be practised about six times a day every two days, until the definite suppression of the neuralgia is obtained.—*N. Y. Med. Times*.

THE USE OF DIPHTHERIA ANTITOXIN.—The following are the recommendations as to the manner of using diphtheria antitoxin made by the American Pediatric Society on the basis of its first report issued some time ago (*British Medical Journal*, July 4th, 1896, p. 37):—(1) Dosage: For a child over two years old the dosage of antitoxin should be in all laryngeal cases with stenosis, and in all other severe cases, 1,500 to 2,000 units for the first injection, to be repeated in from eighteen to twenty-four hours if there is no improvement; a third dose after a similar interval if necessary. For severe cases in children under two years, and for mild cases over that age, the initial dose should be 1,000 units, to be repeated as above if necessary; a second dose is not usually required. The dosage should always be estimated in antitoxin units, and not of the amount of serum. (2) Quality of antitoxin: The most concentrated strength of an absolutely reliable preparation. (3) Time of administration: Antitoxin should be administered as early as possible on a clinical diagnosis, not waiting for a bacteriological culture. However late the first observation is made, an injection should be given unless the progress of the case is favorable and satisfactory.

LATHYRISM.—Mingazzini and Bugliani (*Riv. sperim. di Freniatria*, vol. xxvi.), under the above title, describe the symptoms due to poisoning by a species of lathyrus (vetch). Flour containing the seeds of lathyrus, if eaten by young adults for three or four months, produces a kind of chronic poisoning shown by diminished muscular strength in the lower limbs, occasionally accompanied by weakening of the sphincters of the bladder, rectum, and diminished sexual power. These last disturbances disappear after a short time. Succeeding to paretic condition there appears a spastic stage. The authors believe that the disease is a form of spinal pseudo-paresis of a spastic type due to a chemio-toxic alteration of nerve fibrillæ in the lumbar segment.—*Brit. Med. Jour.*

MYCOSIS OF THE CONJUNCTIVA.—Fuchs (*Soc. Ophthal. de Heidelberg; Annal. d'Oculist.*) in four cases has observed small spots on the conjunctiva which resembled the infarcts of Weiborn, but are found to be mycotic colonies similar to actinomycosis; some yellowish little grains collected into small balls, sometimes covered with epithelium, were also seen. The symptoms were those of a slight conjunctivitis. Scraping sufficed to remove the colonies, but a culture was not obtained.

The Physician's Library.

Twentieth Century Practice. An International Encyclopedia of Modern Medical Science. By Leading Authorities of Europe and America. Edited by THOMAS L. STEDMAN, M.D., New York City. In Twenty Volumes. Volume X., "Diseases of the Nervous System." New York: William Wood & Co. 1897.

The publishers have been compelled to issue Vol. X. before Vol. IX., as the matter for the latter volume was

not completed in time. It will however appear in April.

This volume is certainly up to the standard of its predecessors, which is a compliment enough. Joseph Collin, M.D., of New York, first gives us a complete resume of the "Morphology and Anatomy of the Brain," and then proceeds to deal, in a most clear and lucid manner, with "Disease of the Brain and its Membranes."

This is followed by the well-known authority, Dr. Charles L. Dana, on "Intracranial Hæmorrhage, Embolism and Thrombosis." Dr. Bernard Sachs deals with "Tumors." There are interesting chapters on "Hysteria Stigmata," etc., by Dr. Charles Feré, physician to the Hospice de Bicêtre, Paris. Other contributors are Dr. Sanger Brown, of Chicago; Dr. Howell T. Peshing, of Denver. A few words from Dr. Collin's introduction are not out of place here, as they apply to almost all branches of medical science as well as to this. He says: "Contrasted even with fifty years ago the advances that have been made are astounding. At that time Watson's 'Practise of Physic' was a storehouse of up-to-date medical lore in the English language. To-day it is held in esteem, not only because it is a historical repository, but because of the beauty of its style and the felicity of its clinical descriptions. In the light of our present knowledge, its comments on the causation of disease are lamentable, its teachings on pathogenesis absurd, and its therapy semi-barbarous. It may be said that, withal, its clinical descriptions are unsurpassed, and this is readily granted. But descriptions of disease do not materially advance our ability to prevent or treat them. Such ability is commensurate with progress in determining their causation, and the advances that have lately been made in the conception, the localization, and the pathogenesis of intracranial disease have materially aided the prevention and cure of some of the conditions."

THE
DOMINION • MEDICAL • MONTHLY
 ... AND ...
ONTARIO MEDICAL JOURNAL

EDITOR:
 BEATTIE NESBITT, B.A., M.D., F.C.S. (LOND.)

TERRITORIAL EDITORS:

No. 1.—Dr. J. DUNCAN, Chatham.	No. 4.—Dr. J. CAMPBELL, Seaforth.	No. 9.—Dr. A. R. HARVIE, Orillia.
" 2.—Dr. M. F. LUCAS, Ingersoll.	" 6.—Dr. GILLIES, Teeswater.	" 10.—Dr. H. J. HAMILTON, Toronto
" 3.—Dr. W. J. WEEKES, London.	" 8.—Dr. H. R. FRANK, Brantford.	" 11.—Dr. J. A. CREASOR, Toronto.
No. 14.—Dr. J. S. SPRAGUE, Stirling.	No. 17.—Dr. C. J. CHISHMAN, Ottawa.	

*Address all communications to the Publishers, THE NESBITT PUBLISHING CO., LIMITED,
 Rooms 97, 98, 99, Confederation Life Building, Toronto, Canada.*

VOL. VIII.

TORONTO, FEBRUARY, 1897.

No. 2.

"SUBSTITUTION."

Long before Shakespeare's time there was a distinction drawn between the man who stole his neighbor's chattels and he who stole his good name. The common thief may be in want and we can excuse him; he may be unwilling to work, and we can punish him, but for the slanderer and back-biter there is no excuse and no punishment for his actions. He strikes in the dark and never exposes himself in the open. He insinuates, deludes, and deceives with impunity, because being a cowardly cur by nature he never makes a direct assertion or an open one, for his own character is usually such that he can defend neither. It does not matter what walk of life we are in, the same moral standard should hold. There is too much readiness to imprison the man who steals bread to eat, and let go scathless the embezzling bank cashier, or the misappropriating deacon. We can smile at these peculiarities of human nature, because, after all, it only means that

someone is a trifle poorer, or that a person more or less bad has a bad opinion of a man, but as their opinion is usually the uninvestigated opinion of a man possibly ten times worse than the slandered one, it is not permanently damaging. Yet there comes a time when there is a serious side to all these things. It is well enough to joke, but many men have been ruined by being, as the Irish say, "whispered away," because they were moulded out of the same weak clay as the old women whose tongues were so busily wagging. There is possibly no man whose reputation can be more easily affected in this way than a practising physician. The doctor's success depends purely upon his reputation for moral rectitude and professional knowledge, and it is for this reason that he should be more than scrupulously careful in regard to the administration of medicine. Medical men are possibly the only profession who place the custody of their implements and tools in the hands of others over whom they have no control. The physician may

diagnose ever so carefully, or prescribe ever so wisely, yet the moment that prescription leaves his hands the welfare of his patient is beyond his control. The physician may unite the skill of Osler, Pepper and Loomis in diagnosis, of Wood, Hare and Brunton in therapeutics, but it is all prostrate before the enlightened intelligence of the perfumed drug clerk with a number five head. There are many noble leaders in pharmacy who have done much to strive to raise the drug trade to the dignity of a profession, and many of them have succeeded, but a chain is just as strong as its weakest link. The *morale* of a profession is at the mercy of its weakest member, and in the profession of pharmacy these are notoriously the substitutors. The substitutor is about the basest production of modern commerce, he has no respect for his own good name, his only interest is his percentage and profits. To make a dime on a prescription he first defrauds the manufacturer, who puts up a recognized and well known article and robs him of his good name, by substituting an inferior article. He then robs the dying man, because he does not give him that to which he is entitled. He steals from the physician his good name, because he has given a worthless drug. The patient has not improved and the physician's reputation has suffered in consequence. The man who substitutes in any manner, shape or form can only be held in the eyes of the physician, the patient and the manufacturer as the most common and most contemptible of sneak thieves.

THE MILITIA MEDICAL SERVICE.

Our attention was recently drawn to an article in one of the local military journals suggesting that the salaries of the surgeons to the different permanent corps were too high, and, reckoning on this article, they

undoubtedly were and are. The military editor looks at things from his standpoint, and we think that his point of view may be taken as a fair sample of the average layman's. He points out, and very fittingly, that the physicians attending these corps receive much higher remuneration than the physicians who attend lodges, receive much higher remuneration than the physicians who contract to look after the Indians, and if the salaries of the surgeons of the different corps were cut down to that of a lodge physician, much money could be saved, which could be better used in equipment and drill.

We are accustomed to snobocracy in all its forms. The aristocratic officers of Britain's army consider that the medical men should not rank equal with them according to office; that the captain on the fighting staff is a distinct and incomparably superior person to the captain on the healing staff; that the slaughterer is much more refined and socially higher than the saver of lives. Today the British Army would have to go into the field the most poorly equipped, from an ambulance standpoint, of any of the great nations. Men refuse to enter the British medical service at all, all sorts of inducements are being held out, all sorts of remedies suggested but the proper one, of putting the snobs who have brought about this condition of affairs, in straight jackets. If the salaries of the medical staff, however, are reduced to a lodge practice basis, the profession of this country, and they alone, are to blame. They say the laborer is worthy of his hire, and today the laborer is about the only one that gets it. You can get the full time of an educated medical man or an educated lawyer, in this Province, where the standard of education is higher than anywhere on this continent, not even excepting Europe, for less money than you would pay a coachman or a bricklayer. It is well enough to say that the man who

attends lodge members for a dollar a year is getting all he is worth, probably much more, but we do not see it. The lodges organize, the laborers have their unions, the corporations their combines. Everybody unites to obtain the highest remuneration possible for their services, except the doctors, and many of them go around and, like a second edition of the lamentations of Jeremiah, wail over paying \$2.00 a year for the only protection they ever get.

PHARMACY IN GERMANY.

Pharmacists here are constantly endeavoring to make their profession a closer corporation, yet in Germany, where it is possibly the closest corporation in the world, there is no class so universal against the system as the great body of the pharmacists themselves. By this we do not mean the proprietors, but the licensed assistants who are graduates in pharmacy. Under the German system the Government decides whether a pharmacy shall be opened in a given district, and places each under Government inspection. The physician does no dispensing, and he is not allowed to have a *haus-apotheke* unless the nearest store is at least three miles from him.

The Government inspectors call at frequent intervals and report to the central bureau. Any violation of the pharmacopœia, entails severe penalties on the pharmacist. A dirty floor, dirty shelves, dirty bottles, or damp musty rooms are offences against the law. To have drugs in packages or bottles with wrong labels; prescriptions, scales or weights inaccurate; night bells that won't ring readily; odorous drugs where they will impart their odor to those that should be inodorous; drugs exposed to the light that should be kept in the dark; drugs in bottles that should be in packages, or in packages that should be in bottles; or any possible variation from the most perfect standard, bring down

on the head of the careless or luckless offender all the penalties of the law.

Then the inspector examines all drugs as to their quality, and if they do not correspond exactly to the pharmacopœial requirement, woe betide the offender.

The druggist must keep certain specified quantities of all articles constantly in stock. If everything is not up to requirements, off goes his head. Imagine one of these expert Government inspectors loose in many of the drug stores and departmental stores of this country. It would be worse than a bull in a china shop. Imagine the druggist telling him it was "just as good." But the effect of all this is, after all, to make these concessions to keep a pharmacy immensely valuable, and the purchasers of these have lately paid figures ranging from \$5,000 for country ones, to \$60,000 for city ones. On the other hand, the recently graduated student of pharmacy sees no future (unless he has capital to pay such prices) except to be a manager of a store at the magnificent salary of \$8.00 per week.

PORK-PACKERS' PEPSIN.

Our article on substitution explains our position on this matter. We propose—and we believe we are in entire sympathy with the medical profession—to deal, whenever the occasion arises, with cases of substitution, because when physicians prescribe anything they are entitled to that which the prescription calls for, and that alone, without any alteration, except with the physician's consent and approval.

Considering the matter of pepsin, there is no doubt that in the relief of certain forms of indigestion it is most valuable, and is the only remedy we have. Men have spent years of their lives and large amounts of capital in perfecting this single article. Our pharmacopœia shows the steady advance that has been made in the reliability and activity of pepsin. This

advance has been due not to the physician or physiologist, but to expert pharmacists in the large manufacturing establishments, men of good training, who devoted themselves to one particular line, and that in commercial quantities, and developed it to a point which neither the practising physician nor the physiologist in the laboratory could hope to attain. Thus when we come to speak of pepsin, we naturally think of Fairchild. But the pepsin is derived from the stomach of the pig, and it naturally occurred to the large hog firms in the United States that there might be some money in utilizing this valuable by-product of their industry, and when a physician prescribes over the name of a well-known house, he often gets the product of the pork factory. Physicians often complain that they are overrun with the representatives of various drug houses, yet they must acknowledge that they have always found these gentlemen uniformly courteous and attentive, never trespassing long on the physician intentionally, and we think that it would often be well if the physicians were just to take the opportunity to familiarize themselves with those products, which, from the known integrity of the firm, they are accustomed to prescribe.

FOR AND AGAINST THE BICYCLE.

There are those who oppose as well as those who advocate the bicycle. The two most diametrically opposite opinions as to the use of the modern innovation of the means of locomotion are seen in two articles recently published, one by a man and one by a woman—Miss Charlotte Smith, president of the Woman's Rescue League. She says:

"The physical condition of the average girl will not permit of her

taking long rides on the bicycle, and on account of the exhilarating effects of the spin the practice is kept up until, before the rider knows it, she finds herself a physical wreck, burdened with serious diseases. All this pure-air-of-heaven racket makes me weary of life. I have never yet seen a woman who looked well on the bicycle, and as far as riding being good for the complexion, I take no stock in that excuse whatever. The position assumed by bicyclists is one that of itself gives rise to disorders of the system, and invariably results in weakening the backs of delicate girls who ride for the purpose of gaining strength."

Then she goes on to tell us of the effect of riding on the morals, which are even more doleful than the effects on the body. She proposes to make an anti-bicycle crusade in all our large cities.

The other view most roseate is from an article entitled, "Throw Physic to the Dogs," in the *Wheelman*. It concludes by saying:

"Honestly, the bicycle has done more for the good of the human race than all the medicines compounded since the days of Hippocrates. Fresh air is the finest tonic in the world, and the only reason that it has not been more popular is that it has cost nothing. That's the perversity of human nature. In fact, people would not imbibe this fresh air even now if it were not actually forced on them. Fortunately there is no fun in riding a wheel in a closed room, around and around, and so riders must go into the open air, and breathe it in spite of themselves. If the doctors want to get even they must advise their patients to ride an hour a day in the cellar or a room, but candidly, we do not think they would do it; that is, if they have ever ridden in the open air. No, it seems hard, but we feel that the doctor's occupation is gone."

Bartholow

Says: "It has been supposed that any oil or fat may be used in place of cod-liver oil, and cream has been prescribed in this belief. These notions are erroneous."

Scott's Emulsion

"The Standard of the World"

contains the purest cod-liver oil—the *whole oil*—combined with hypophosphites and glycerine. The best authorities declare that "When cod-liver oil is indicated, all the oil must be used, not a fractional amount only of extracted matter."

In Prescribing—Specify "Scott's" Emulsion, otherwise your patients may get some of the "Ready-made" emulsions which druggists purchase *in bulk* or have bottled for them.

Who Knows About These Emulsions?—How much oil do they contain? Is it the best oil? Are there any other ingredients? Is the emulsion permanent? Who is responsible?

For convenience in prescribing in unbroken packages we have 50c. and \$1.00 sizes.

SCOTT & BOWNE

Manufacturing Chemists, Belleville, Ont.

CONGENITAL ANONYCHIA.—Jacob of Berlin describes a case of three children in one family, all otherwise healthy and well developed, and of robust parentage, who have no traces of nails on either fingers or toes, except on one finger in one girl.—*Deutsche Med. Woch.*, December 10.

NUTRITIVE VALUE OF CORN MEAL.—From *Modern Medicine* we learn that Prof. Atwater, who has for many years been engaged in investigations relating to foods, for the United States Department of Agriculture, has been led to the conclusion that, considered from an economical standpoint, corn meal has the highest nutritive value of all foods. Ten pounds of corn meal contain more than eight pounds of actual nutriment, while the same quantity of potatoes possess but three-fourths of a pound of nutrient material.

It is a.....

difficult matter in Accident Insurance to define the term "Total Disability." The

Double Liability Schedule Policy

issued by the Manufacturers' Guarantor and Accident Co. shows at a glance the indemnity for injuries received, which is payable as soon as the claim is passed, under ordinary circumstances not more than a week elapsing from

Date of Accident to Issue of Cheque

For further information write to the head office, Toronto, Canada, or apply to your local agent.

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-renown **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

All orders from the country promptly attended to.

BOTT'S MALT STOUT

TELEPHONE 625

433 Yonge St., Toronto, Ont.

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., SEC'Y, - Detroit, Mich.

Western Pennsylvania Medical College

PITTSBURG, PENN., 1896-97.

Medical Department of the Western Uni-
versity of Pennsylvania.

The Regular Session begins on the third Tuesday of September, 1896, and continues six months. During this session, in addition to four didactic lectures, two or three hours are daily allotted to clinical instruction. Attendance upon four regular courses of lectures is requisite for graduation. A four years' graded course is provided. Four years required from Oct., 1896. The Spring Session embraces recitations, clinical lectures and exercises, and didactic lectures on special subjects. This Session begins the Second Tuesday in April, 1897, and continues ten weeks.

The laboratories are open during the Collegiate year for instruction in Chemistry, Microscopy, practical demonstrations in Medical and Surgical Pathology, and lessons in Normal Histology. Special importance attaches to "the superior clinical advantages possessed by this College."

For particulars see Annual Announcement and Catalogue, for which address the Secretary of Faculty,

PROF. T. M. T. MCKENNAN,
810 Penn Ave.

Business Correspondence should be addressed to

PROF. W. J. ASDALE,
Ellsworth Ave., Pittsburg.

Yours for Health

The
Salt River Valley
of Arizona
and the various
health resorts in
New Mexico

are unrivalled for the cure of chronic lung and throat diseases. Pure, dry air; an equable temperature; the right altitude; constant sunshine.

Descriptive pamphlets issued by Passenger Department of Santa Fe Route, contain such complete information relative to these regions as invalids need.

The items of altitude, temperature, humidity, hot springs, sanatoriums, cost of living, medical attendance, social advantages, etc., are concisely treated.

Physicians are respectfully asked to place this literature in the hands of patients who seek a change of climate.

Address G. T. Nicholson,
CHICAGO G. P. A., A., T. & S. F. 27.

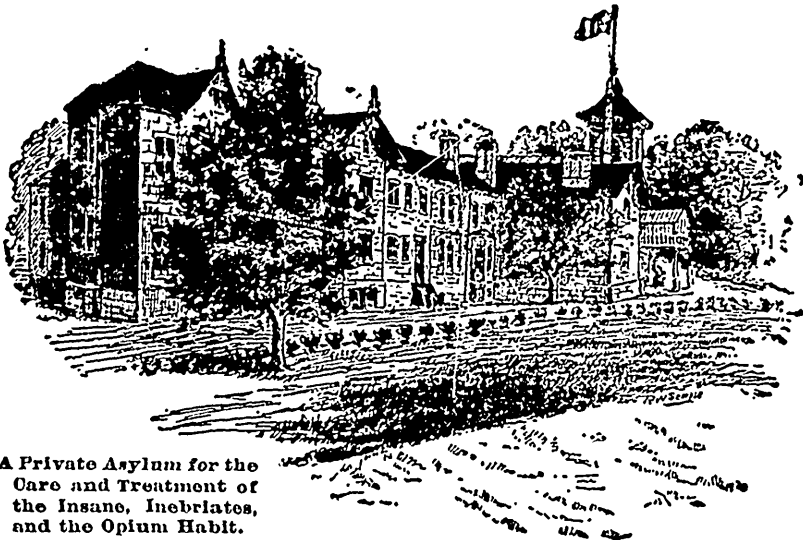
POP-CORN TEA.—In a paper entitled "Therapeutics of a Country Doctor," published in the *Journal of Science and Medicine*, the writer says: "I am not certain where I first heard of this remedy, but experience has amply demonstrated that a tea or infusion made from freshly-popped corn will relieve obstinate vomiting in pregnancy after bismuth, cerium, cocaine, etc., have utterly failed, and is therefore worthy of notice."

SANITARY REGULATIONS OF HUNGARY.—The *Deutsche Med. Woch.* December 17, states that the sanitary regulations of Hungary are only surpassed by those of England, and in some particulars are superior to the English. Medical care and assistance is assured to all by their systems of community doctors, and fines are enforced for neglect to summon a physician when a child under seven is ill,

and also for administering opiates, etc., to children without a physician's prescription. It is one of the duties of the Minister of the Interior to send an expert to localities where the death rate is higher than usual, even when there is no epidemic, to ascertain and remedy the causes. All manufacturing establishments are compelled to keep appliances and dressings for wounds and to arrest hæmorrhage constantly in readiness. Pensions are bestowed upon the widows and orphans of physicians, surgeons and nurses who die in the performance of their duty. Syphilitics are received into military hospitals, if there are none other convenient. The regulations in regard to epidemics, midwives, charlatanism, and sanitary homes for the poor are especially stringent. With it all, however, the death rate was 32.5 per thousand in 1890, and 29.4 in 1895. In Prussia the same years it was 24.5 and 21.8.

H
O
M
E
W
O
O
D

R
E
T
R
E
A
T



G
U
E
L
P
H

O
N
T.

A Private Asylum for the Care and Treatment of the Insane, Inebriates, and the Opium Habit.

DIRECTORS.

J. W. LANGMUIR, Esq., Ex-Inspector of Asylums, etc., for Ontario, *President*.
E. A. MEREDITH, Esq., LL.D., Ex-Chairman of the Board of Inspectors of Asylums for Canada.
Vice-President.
ROBERT JAFFRAY, Esq., Vice-President of the Land Security Company, Toronto.
JAMES A. HEDLEY, Esq., Editor *Monetary Times*, Toronto.

MEDICAL SUPERINTENDENT.

DR. STEPHEN LETT, who has had 25 years' experience in this special line of practice.

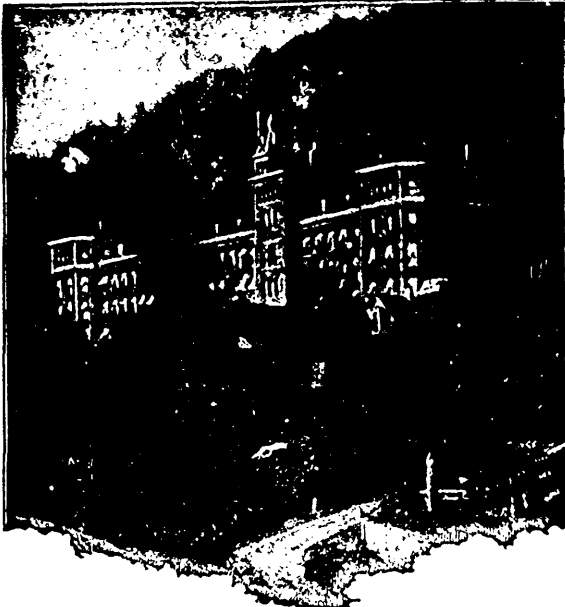
For terms and other information, address

DR. STEPHEN LETT, Homewood Retreat, GUELPH, ONT.

... THE ...

JACKSON SANATORIUM

Dansville • Livingston Co. • New York



ESTABLISHED IN 1858

and malaria. Thorough drainage and sewerage systems. Delightful walks and drives.

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

Extensive apartments for treatment arranged for individual privacy. 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**

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

Freedom from the taxations of fashionable life, and from the excitements and temptations of popular resorts.

Electric Bells, Safety Elevator, Open Fires, Library, Daily Papers, and every appliance for comfort, health and good cheer.

On line of Del. Lack. & Western R.R., between New York and Buffalo without change.

For Illustrated Pamphlet and other information address,

J. ARTHUR JACKSON, Secretary

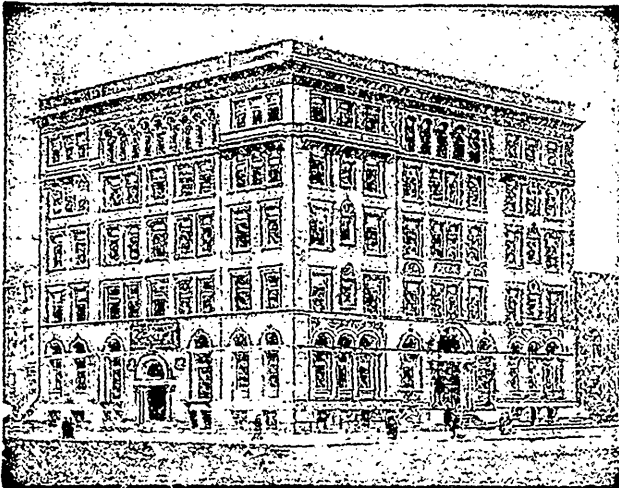
PARADOXICAL ACTION OF LAVAGE OF THE BLOOD.—Carrion and Hallion have been studying the diuresis produced by injections of NaCl, 6 to 9 grams per 1000. They assert that numerous tests before, during and after the injections have proved that when the urinary secretions are most abundant the elimination of urinary substances, aside from the NaCl, diminishes to a very small proportion. The chloride of sodium seems to take the place of the other elements.—*Bulletin Medical*, December 5.

YOUNG FATHER(anxiously)—“Is it a boy or a girl, nur-e?” Nurse—“It's three of 'em, sir! Three lovely boys!” Young Father—“Good gracious! This comes of marrying a girl whose father was in the wholesale line of business.”—*Anon.*

LEGALIZED SUICIDE.—The history of a young wife of a Sussex farmer, on whom an inquest was held on December 16th, is a type of the story of many other narcomaniacs, who involuntarily and prematurely commit self-destruction, with the practical sanction of the law. At all events, her life might have been prolonged and possibly her suicidal impulse might have been destroyed if the law had stepped in and applied remedial means at an early stage of her disease. At the age of twenty-one she was a narcomaniac, with an inherited inebriate diathesia. On the Sunday prior to her death she attempted to drown herself, but her courage failed her owing to the severity of the weather and the coldness of the water in the pond. Though watched she gave the

New York Post-Graduate Medical School and Hospital

FIFTEENTH YEAR-SESSIONS OF 1896-97.



The Post-Graduate Medical School and Hospital is now permanently located in its new building, which has been erected to fill all the modern requirements for a Hospital and medical school. It is an eight-story fire-proof structure, containing accommodations for 175 patients. The babies wards, formerly in the adjacent building, are now an integral part of the institution under its own roof. The classes in the school have been so large in the last few years, and the difficulties for attending them so increased, that this building has been erected, not only for the classes of practitioners, but also that more patients might be received in order to form a great teaching hospital. This has now been accomplished, and every opportunity, both in the dispensary and hospital, is afforded in all departments of medicine and surgery. The great major operations are performed in the amphitheatre of the institution, which is fitted up in the very best manner to secure best surgical results. Pathological and Histological Laboratories are also a part of the school. The Faculty are also connected with most of the great hospitals and dispensaries in the city, where their clinics are held for the benefit of the matriculates of the Post-Graduate Medical School. Practitioners may enter at any time.

Members of the profession who are visiting New York for a day or two, will be heartily welcomed at the Post-Graduate School, and if they desire to attend the clinics, a visitors' ticket good for two days will be furnished them on application to the Superintendent.

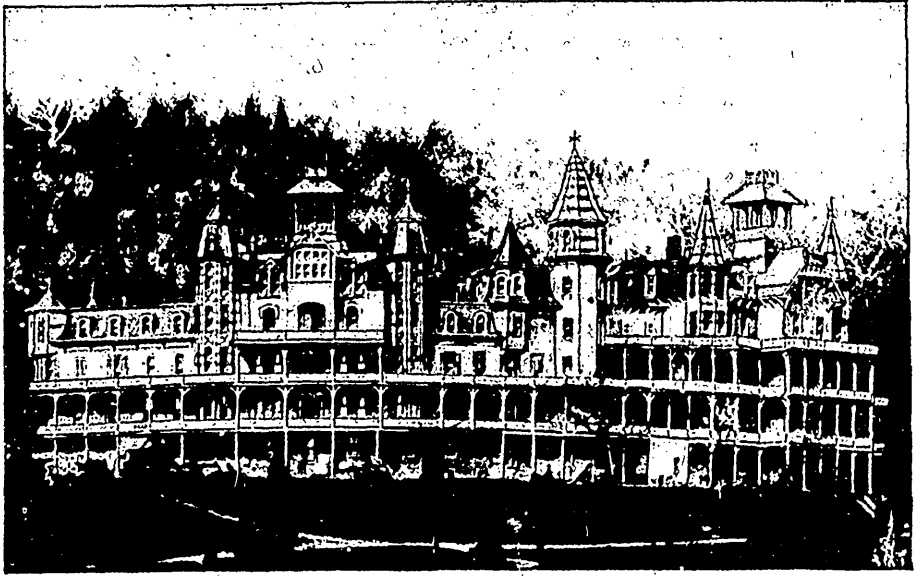
D. B. ST. JOHN ROOSA, M.D., LL.D., President,

CHARLES B. KELSEY, M.D., Secretary of the Faculty.

ALEXANDER H. CANDLISH, Superintendent.

Cor. Second Ave. & 20th Street, New York City.

Physicians coming to the School will please ask for the Superintendent.



WALTER'S SANITARIUM

Walter's Park, near Reading, Pa.

Offers exceptional advantages for the winter treatment of invalids, as well as for the comfortable entertainment of the valetudinarian traveller. Its Southern Location; its dry, pure bracing Atmosphere, absolutely free at all seasons from malaria, mosquitoes and usually from dew; pure, soft spring Water from granite rock springs; its Climate said to be "the finest in the world"; its scenery declared by travellers "equal to anything in Europe or America," all contribute to make this a great Sanitarium.

It is not less noteworthy as a Sanatorium where sick people may recover health. The building is of Granite Rock, five stories in height, 300 feet front, the product of Canadian genius and work. It is heated by steam and open grates, lighted by electricity, finished and furnished in excellent style. It has hydraulic elevator and extensive appliances for sanatory treatments.

BATHS, MASSAGE, SWEDISH MOVEMENTS (mechanical and manual),
ELECTRICITY (Static, Galvanic, Faradaic).

Regularly educated physicians with 25 years' experience with sanatory methods.

We have U. S. money order post office (Walter's Park). Long distance Telephone in connection with READING, PA., and all telegraph offices.

Our station is WERNERSVILLE, twenty minutes from the Sanitarium, and two hours from READING TERMINAL, PHILADELPHIA.

Terms exceptionally moderate for first-class accommodations.

ILLUSTRATED CATALOGUES FREE.

The value of anything is proved by its imitations. Be sure to address correctly.

ROBT. WALTER, M.D.

Walter's Park, Pa.

watcher the slip, and was arrested while endeavoring to force her false teeth down her throat. Later in the night she again escaped, and procured rat poison, with which she terminated her existence. How much longer is this wholly unnecessary and preventable long array of diseased narcomaniac involuntary suicide to be allowed to go under the very eye and practical license of the law?

THE OBSTETRICAL TREATMENT OF PUERPERAL ECLAMPSIA.—According to P. Drejer (*Norsk Mag. f. Laegevidensk.*), the best treatment in puerperal eclampsia, both for mother and infant, is speedy delivery, whether labor has commenced or not. The best method of doing this is that which any medical man can employ, and for this and other reasons the author does not recommend Duhresen's plan (by incisions), but prefers simple dilatation. Hegar's dilators

are used in the first instance; then when the cervical canal will admit one finger the rest of the dilatation is carried out manually, and delivery is completed by the method of Braxton Hicks. The colpeurynter is not much used in Norway, for the marked variations in temperature are apt to interfere with caoutchouc dilators. Bimanual compression is applied to the uterus for about one hour after the removal of the placenta, and so hæmorrhage is prevented. Drejer gives details of three cases in which this method was employed.—*British Medical Journal*.

PHARMACISTS are not held in high esteem by Dr. Schweninger, Bismarck's physician. He says the physician who places himself at their service and aids them to lay up a fortune at the expense of humanity dishonors his calling.

Tough and Trusty

Our

BOX CALF SCHOOL BOOTS

Are the delight

of the children

We take great care in fitting the girls and boys with serviceable boots for school going. We want them to come to us again, and come they will, for we make them comfortable and happy with every shoe we put on their feet.

H. & C. Blachford,

83 to 89 King St. E.,
TORONTO

LAKEHURST

SANITARIUM

Oakville

The attention of the medical profession is respectfully drawn to the uniform success attending the treatment of Alcoholism and Morphine addiction at Oakville. A prominent medical man in Toronto has, within the last few weeks, paid a glowing tribute to its efficacy in the case of one of his patients who had long since lost his susceptibility to the ordinary form of treatment employed, and whose life seemed to hang in the balance. Many come to Oakville in the last stages of the malady, yet of these but two cases in four years have proved to be beyond reach of our treatment, a record well deserving the thoughtful consideration of the profession.

For terms, etc., apply to

MEDICAL SUPERINTENDENT,

Oakville, Ont.

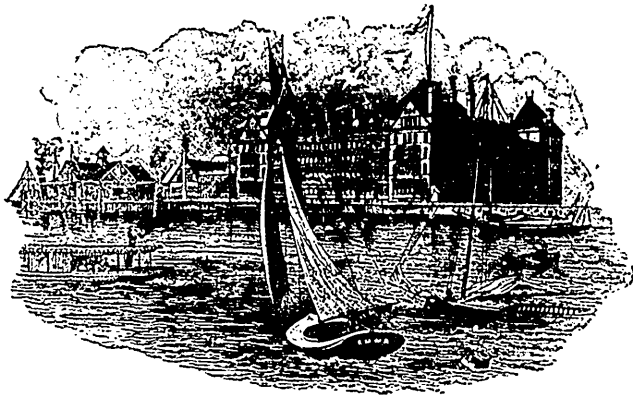
HOTEL CHAMBERLIN

(ACCOMMODATES 700)

Old Point Comfort, Fortress Monroe,

VIRGINIA.

Headquarters for Army and Navy.



Hot and Cold, Fresh and Salt Water Baths.

Sanitary arrangements and plumbing supervised by Government Engineers.

Cuisine and appointments unexcelled by any hotel in the South.

Sun Parlors on every floor. Winter Palm Garden.

Music every evening, and Entertainments weekly in the large Ball Room.

Canadian people seeking a comfortable home for the Winter months would do well to correspond with the Manager.

GEORGE W. SWETT, Manager,

Winter Rates, \$4.00 per
day and upwards.

*Formerly of Windsor Hotel, Montreal, Canada
and Brunswick Hotel, New York City.*

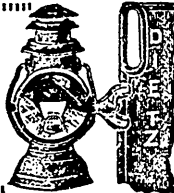
WATER.—By I. N. Love, M.D., St. Louis. Drugs, drugs, drugs, seemed to be the chief inspiration in the life-work of too many men. Hydropathy has been a wonderful service to humanity. We can appreciate the necessity of water when we remember that 75 per cent. of our body is made up of water. It is just as important as the solids in life's conditions. The demands for water are affected by the amount of muscular exercise, and the degree of temperature to which the body is exposed. For an irritated stomach or bilious colic nothing is superior to liberal quantities of hot water. For "a night out," two or three cups of hot water along with a cup or two of hot coffee nothing is superior. It soothes the nervous system if you will abstain from food a few hours. We need water for nutrition, but also as well, and more important, for a proper elimination. Water taken freely acts as a purifier of the system, both by flushing and by its solvent action. The majority of people drink too little water. I would highly advise training children to drink more water. It is a most important agent in improving the

complexion. Medicine should be given in large quantities of water. In typhoid fever I insist upon free drinking of pure water. No solvent will act better in removing uric acid from the system, and the only pure water is distilled water. Copious draughts of water for its stimulating effect or the reduction of temperature has been used many years. The hot pack in convulsions of children is often misused. Better begin with a tepid heat and add cold water gradually. Hot water locally in inflammatory conditions is most excellent. Often I have thought the surgeon's knife might be laid aside if we knew how to use water. A large number of the cases of appendicitis, in my opinion, might be relieved by a thorough washing out of the bowel. —*Coll. and Clin. Record.*

A citizen, who deserves well of his country, had a large family, to which additions were constantly making. One day one of his little boys was thus interrogated: "John, how many brothers and sisters have you got?" "I don't know," answered the boy; "I hain't been home since morning."

DIETZ DRIVING LAMP

IT will not blow nor far out.
IT gives a clear white light.
IT looks like a locomotive headlight.
IT throws all the light straight ahead
from 230 to 300 feet.
IT burns kerosene.



We Want Agents

everywhere. We give Agents a **SAMPLE LAMP FREE** under certain conditions. Cut out this advertisement and send it to us for full particulars.

R. E. DIETZ CO., 60 Laight St.,
Established 1840. New York City.

THE MERCHANT CIGAR STORE

I am very anxious to have the Medical Profession call upon me and make a trial of my Goods. I keep only the best and most finely matured goods, in fact my stock is the choicest in the city. I will be pleased to give a Special Discount to Students. I have the finest 5 cent cigar in the Dominion—the "Fletcher's Merchant" Havana Cigar, \$1.50 a box of 100; or, \$2.25 box of 50.

R. A. FLETCHER, 18 King Street East, Toronto.

GENEVA LITHIA MINERAL WATER

Strongest in the Market

Recommended by Physicians in the
United States for

STOMACH | **AND**
LIVER . . | **BLADDER .**
KIDNEY . | **TROUBLES**

0000

Spring at Geneva, N.Y.

Main Office:

20 Court Street, BROOKLYN, N.Y

0000

Canadian Agents:

LYMAN, KNOX & CO.

Montreal: 374 and 376 St. Paul St.

Toronto: 43 Colborne St.

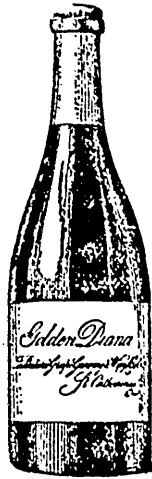
THE DOCTOR'S ADVICE

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 15c., 60lb. box \$1.50. **TORONTO SALT WORKS, 128 Adelaide Street East, Toronto—Importers.**

MEDICINAL WINES



We produce them from the pure juice of the grape. Our wine are highly recommended throughout the Dominion by eminent physicians for their medicinal qualities. We can specially recommend our

FINE OLD PORT

for the use of convalescing patients, and for those preferring a drier wine, we would recommend our

DRY CONCORD.

Ask for our goods, or write us direct.

The Ontario Grape Growing and
Wine Mfg. Co.

ST. CATHARINES, ONT.



Shows pelvis as it rests on ordinary Saddle.



Shows pelvis as it rests on Christy Saddle.

CHRISTY Anatomical SADDLE

The only saddle that is built on anatomical principles. P. 10, \$5.

Endorsed by Everyone. Free to Physicians.

Our booklet on the saddle question. A complete treatise from the standpoint of the cyclist and physician.

A. G. SPALDING & BROS.

NEW YORK. PHILADELPHIA. CHICAGO.

Largest manufacturers in the world of Bicycles, Bicycle Sundries and Bicycle Clothing.

Special Notice to Physicians!

I contract for all kinds of CRUSHED GRANITE and PORTLAND CEMENT CONCRETE SIDEWALKS and FLOORS.

Drains Repaired on Sanitary Principles.

Estimates Furnished.

◆ TERMS MODERATE ◆

W. CUMMING, 739 Gerrard St. East.

THE ACTION OF THYREIODINE IN OBESITY.—Dr. Grawitz relates the two cases of two women who were treated with thyreiodine for obesity. In one of them the use of the remedy was continued for only three days, at the rate of fifteen grains a day. During this period the patient lost three kilogrammes in weight; and this, says the author, was all the more remarkable from the fact that she took milk, butter, white bread and eggs freely, although restriction in the matter of these articles before the thyreiodine was used had brought about only a very trifling loss of weight. An increased excretion of nitrogenous matter was evident in this case—to the amount of about four hundred and seventy-five grains—so that a decided loss of weight could not fail to result. There was, however, no increase of the fluid excretions, and the urine contained neither albumen nor sugar. The

other patient took fifteen grains of thyreiodine daily for three weeks, without any restriction of her diet; and she, too, lost three kilogrammes in weight. When she discontinued the use of the remedy her reduction of weight persisted for a short time, but she soon began to regain her flesh. Her subjective condition was not affected, and her urine was free from both albumin and sugar.—*New York Med. Jour.*

INHALATIONS IN PHTHISIS.—Dr. A. J. Dower, of Brooklyn, gives, in the *Brooklyn Medical Journal*, the following formula :

Iodophenol	℥ ij.
Ethyl iodide	℥ j.
Spiritu vini rectificatus,	℥ ij.
Spiritus ether. co.	
(Squibb's)	℥ j.
Aq. æ	℥ j.



CAUTION.—Be sure the name S. H. Kennedy, Mgr., Johnstown, N. Y., is printed at the bottom of labels. All others are SPURIOUS.

S. H. Kennedy's Concentrated Extract of
OAK BARK (QUERCUS ALBA),
"WHITE AND DARK."

Most Valuable Aqueous Astringent known to the medical profession, and superior to anything of its kind made. DR. J. MARION SIMS wrote of it in a personal letter under date of August 12th, 1871, in which he said, "I have used the Extract of 'White Oak Bark, Q. Alba,' to my entire satisfaction. I gave to one of my professional brethren some of it to test in his practice. After using it, he agreed with me that it was superior as a medicinal to the 'Hemlock Extract Pinus Canadensis.' I bespeak for this new 'Oak Extract, Q. Alba,' a cordial reception by the profession."

S. H. KENNEDY, Mgr., Johnstown, N. Y.

LYMAN BROS. & CO., Wholesale Agents, TORONTO, ONT.

Corner Queen and
Sherbourne Sts. . .

= = Toronto = =

Telephone
... 824...



R. ROBINSON
CHEMIST and
DRUGGIST

P.S.—I wish to draw the attention of all Medical men to the fact that I am Making a Specialty of Dispensing Doctors' Prescriptions, and that I use only the Purest Drugs. I can be reached any hour, day or night, by door bell for telephone, when prescriptions can be dispensed and sent out promptly.

UNIVERSITY OF BUFFALO.

MEDICAL DEPARTMENT.

The Fifty-first Regular Session commences September 14, 1896,

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.

New York Polyclinic and Hospital

THE NEW YORK POLYCLINIC is the oldest post-graduate medical school in America, and was founded with the object of giving physicians who desire to keep abreast of an advancing science opportunities of studying clinically, and according to the latest scientific methods, *Medicine and Surgery in all Departments*. The school is for graduates only, and practical instruction is given in every branch of the subject. *The Clinical Material for every subject is abundant*, and Canadian physicians will find the opportunities for either general or special study far superior to those of London. An excellent hospital, filled with interesting cases only, is in connection with the school and in addition the professors are connected with almost all the principal hospitals in the city, thus giving unlimited opportunities to students.

Practical Obstetrics, Clinical Microscopy, Pathology and Bacteriology, are also taught. The regular session lasts from Sept. 25th to June 15th, and physicians can enter at any time.

... FACULTY ...

Surgery—John A. Wyeth, M.D., R. H. M. Dawbarn, M.D.,
Wm. F. Pluhner, M.D., G. R. Fowler, M.D., W. W.
Van Arsdale, M.D.

Medicine—R. C. M. Page, M.D., W. H. Katzenbach, M.D.,
J. Adler, M.D.

Gynecology—W. Gill Wylie, M.D., Paul F. Munde, M.D.,
Henry C. Coe, M.D., Florian Krug, M.D., J. Riddle
Goffe, M.D., W. R. Pryor, M.D.

Eye—David Webster, M.D., W. B. Marple, M.D.

Rectum—J. P. Tuttle, M.D.

Orthopaedic Surgery—W. R. Townsend, M.D.

Diseases of Digestive System—W. W. Van Valzah, M.D.

For Catalogue or information, address

Ear—Oren D. Pomeroy, M.D., J. E. Sheppard, M.D.
R. C. Myles, M.D.

Throat and Nose—D. Bryson Delavan, M.D., Jos. W.
Gleitsmann, M.D., Morris J. Asch, M.D.

Diseases of Children—L. Emmett Holt, M.D., August
Seiber, M.D.

Diseases of the Skin—A. R. Robinson, M.D., Edward B.
Blonson, M.D.

Nervous Diseases—Landon Carter Gray, M.D., E. Sachs,
M.D.

Obstetrics—Edward A. Ayers, M.D.

Intubation—Dillon Brown, M.D.

JOHN GUNN, Superintendent, or, J. RIDDLE GOFFE, M.D., Secretary.

214-218 E. Thirty-Fourth St., NEW YORK.

THE ALCOHOLIC TREATMENT OF CARCINOMA.—Dr. Hasse, Nordhausen, read a paper on this subject at the Surgical Congress (*Med. Press and Circular*). He had made a communication on attempts to treat carcinoma by alcohol in 1878. The treatment consisted in the injection of alcohol into the circumference of the growth, and in three cases of carcinoma of the uterus had led to good results. He continued his observations for a year, and since then he had waited. After twenty-three years all the patients were alive and well. This result was very remarkable, and was superior to that obtained by surgery. The treatment was suitable for mammary carcinoma. It had the inconvenience of taxing the patience of both patient and surgeon, but it had the immense advantage of protecting against recurrence. The treatment owed its success to

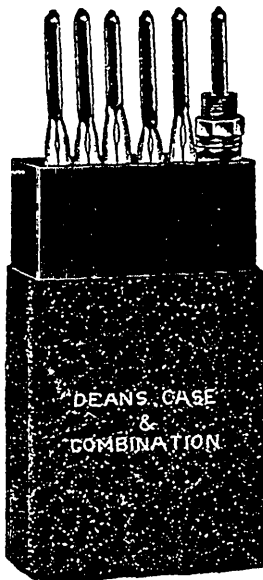
the formation around the growth of a connective tissue capsule, that obliterated the blood vessels and induced shrinking of the tumor. He asked his colleagues for further cases to treat.—*N. Y. Med. Times*.

RINGWORM OF THE BODY.—Cavafy's lotion is an efficient remedy in this variety of the disease. The ointment of copper or mercuric oleate, or both used alternately, is an efficacious application. Other remedies which are useful, either in the form of lotions or ointments, are mercuric chloride (2 or 3 grains to the ounce), boric acid, carbolic acid, thymol, chrysarobin (7 grains to the ounce of chloroform), silver nitrate (40 grains to the ounce of sweet spirit of nitre), ointment of acid nitrate of mercury, of oil of cade, salicylic acid, thymol, or resorcin, etc.

Exactitude, Excellence and Economy

ENGLISH CLINICAL THERMOMETERS

Direct from the Maker



CASE A.

\$4.00

Post Free

. In the Dominion .

\$4.00



Every Thermometer is Tested, and Bears the
Maker's Name and Warranty



ALFRED E. DEAN, JR., Thermometer
:: Maker ::

To the principal British and Foreign Institutions

73 HATTON GARDEN, LONDON, and
55 Faub'g Poissoniere, Paris

Obtainable of the maker at above addresses, or through the NESBITT
PUBLISHING Co., LTD., Toronto.

For further particulars see last month's issue.

THE
'Columbia'
 Home
 Graphophone



Brings the mirth and music of the world into your own drawing room. There is no limit to its repertoire. It sings, plays, talks and faithfully records and reproduces every sound. The 'Columbia' is the latest model, most compact, and equal in effect to the highest priced machine, yet it costs only

\$25.

COLUMBIA PHONOGRAPH CO.,

Dept. T., 1155, 1157 & 1159 Broadway, New York.
 919 Penna. Ave., Washington, D.C.

720-722 Olive St., St. Louis, Mo.
 110 East Balto. St., Baltimore, Md.

The Medical Profession all over Canada are directed to our **ABSOLUTELY PERFECT**

STORAGE BATTERY

We are aware that in the past Storage Batteries have proved almost a fizzle, and have been to the practitioner the cause of much annoyance owing to their having to be constantly recharged. The

JONES & MOORE STORAGE BATTERY

however, is so put together that the more it is used the better the current becomes. We want every doctor in Toronto to call at our premises and see this battery, where it will be found in operation. The price is right, and we know that every physician seeing the instrument will at once purchase.

Jones & Moore Electric Co.

'PHONE 2310

146 YORK STREET, TORONTO, ONT.

HIS TESTIMONY.—First medical student—"You find the wheel beneficial?" Second medical student—"Very! It gives you a practical knowledge of contusions and dislocations which it would be very difficult to obtain otherwise."—*Puck.*

CHLORIDE OF MORPHINE AND POTASSIC CYANIDE.—Hein (*Munch. med. Woch.*) relates some experiments showing an antagonism between these two agents. A dog was injected with morphine, and in order to hasten death, afterwards with cyanide. At first it improved considerably after the cyanide injection, but later symptoms of cyanide poisoning appeared and the animal died. The question thus arose whether it would be possible to make a poisonous dose of potassic cyanide harmless by a non-lethal dose of morphine.

The author first determined the lethal doses of both substances for white mice. Mice were injected with potassic cyanide, and afterwards with morphine at varying intervals. It appeared from the experiments that mice poisoned with cyanide could be saved by morphine, or, at any rate, the time of death could be considerably postponed. Thus, out of ten mice six were saved, three died in from one to three hours, and one died as rapidly as the control animal. Mice can stand large doses of cyanide. If potassic cyanide and morphine chloride are mixed in a test tube the alkaloid is precipitated and free hydrocyanic acid is produced; quite other products must be formed in the body. If these experiments should be confirmed by others in larger animals this method may prove of service in the human subject.—*British Medical Journal.*

ONTARIO Vaccine Farm.

ESTABLISHED 1885.

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.

RUBBER STAMPS
PRESS. & WAX SEALS

I.C. FELL & Co.
VICTORIA ST.
TORONTO. (COR. LOMBARD ST.)

ENGRAVING & DIE SINKING
STENCILS
STEEL STAMPS
BURNING BRANDS, CHECKS &c

CRITERION
STEREOPTICONS
MAGIC LANTERNS &
ACCESSORIES

BEST AND MOST PERFECT APPARATUS FOR VISUAL TEACHING

SCIENTIFIC PROJECTIONS
& PRIVATE USE

ELECTRIC FOCUSING LAMPS
For Photo-Engravers, Stage Lighting, Etc.

THE 1902 CATALOG
J.B. COIT & Co.
115-117
NASSAU ST.
NEW YORK

Agents in
BOSTON,
PHILADELPHIA,
ATLANTA, ST. LOUIS,
BUFFALO, CHICAGO,
SAN FRANCISCO.

Excelsior Springs

The
Marvelous
Waters



ARE NATURE'S GREAT SOLVENT, AND
ARE AN UNFAILING REMEDY FOR

Inflammation and Catarrh of the
Bladder, Bright's Disease,
Diabetes, Gravel, Gout,
Rheumatism, Blood Disorders,
Dyspepsia, Liver Troubles,
Debility ::::::::::::::

AND ALL
DISEASES
COMMON TO
FEMALES

The waters contain iron in that most rare and valuable form for ready absorption and rapid medication, namely, a solution of the protoxide in carbonic acid. In addition to the **Iron Waters**, there has been obtained from an artesian well a flow of **Salt Sulphur** water of great value as a stomach water and gentle laxative, and for bathing.



THE ELMS

Is open the year round, and has a
capacity of 500 guests. It is one
of the Fine Hotels of the World.

All modern conveniences ✦ Cuisine Unsurpassed
Location Healthy ✦ No Malaria ✦ Climate Mild.



A complete bathing establishment within the hotel, with Turkish, Russian, Electric, and hot or cold Salt Sulphur tub baths. For handsomely illustrated pamphlet, address :: :: :: :: :: :: :: :: :: ::

GEO. H. HEAFFORD,

Or, **H. C. FISH,**

General Passenger and Ticket Agent, Chicago, Ill.

G. M. Excelsior Springs Co., Excelsior Springs, Mo.

PRURITIS OF THE VULVA.—After as far as possible eliminating the cause, Dr. Morain orders vulvar lotions to be used night and morning of very hot water to which one per cent. of chloral, coal-tar, or aromatic vinegar has been added. In addition to this, the affected region should be painted with the following solution :

℞ Cocaine hydr chloride, 15 grs.
Distilled water..... 150 grs.

Dr. Morain also makes use of the following ointments :

℞ Menthol..... 45 grs.
Olive oil..... 15 grs.
Lanolin..... 90 grs.

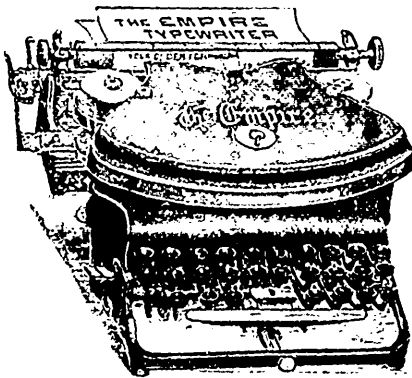
℞ Potassium bromide,
Salicylic acid,..... 15 grs.
Glycerole of starch... 300 grs.
Calomel..... 6 grs.
Extract of belladonna, 3 grs.

He also recommends the following

solution, which is to be used as a lotion :

℞ Mercury bichloride... 30 grs.
Alcohol..... 150 grs.
Rose water..... 600 grs.
Distilled water..... 14 ozs.

If these remedies fail, says Dr. Morain, electricity, either the continued or the interrupted current, should be tried. In particularly rebellious cases, when the itching resists all kinds of treatments, resection of the tissues of the affected parts should be resorted to.—*New York Medical Journal.*



THE "EMPIRE"

Medical or Ordinary Key-board as desired

VISIBLE WRITING, PERMANENT ALIGNMENT

MINIMISED KEY-BOARD

28 Keys. 84 Chars.

*

SIMPLICITY . . .

One-third the parts found in others.

DURABILITY . . .

Steel parts hardened.

PORTABILITY, only weighs 15 lbs.

READ THE FOLLOWING:

120 Mansfield Street,
Montreal, Oct. 7th, 1896.

The Williams M'fg Co.

GENTLEMEN,—I have been using the Empire Typewriter now for nearly a year. It has given me entire satisfaction and I have pleasure in recommending it.

F. R. ENGLAND, M.D.

Montreal, Oct. 23rd, 1896.

The Williams M'fg Co.

DEAR SIRS,—In reference to the "Empire" Typewriter machine sold to me sometime ago, I beg to say that it has proved quite satisfactory.

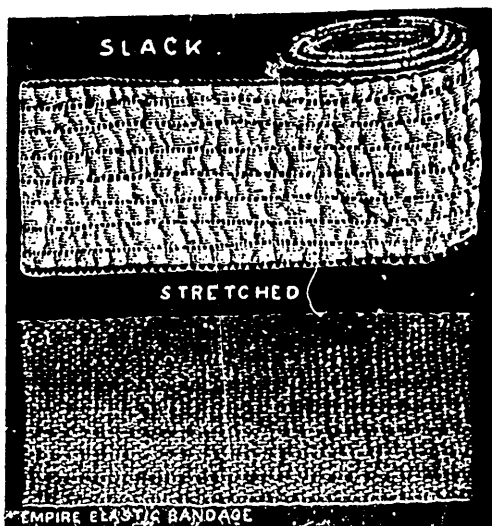
Yours truly,

J. ANDERSON SPRINGALE, M.D.

ONLY \$55.00.

We will send a machine to any Physician upon receipt of the cash, and if, after using it for ten days, it is not found as we represent, return it and we will refund the money.

THE WILLIAMS MANUFACTURING CO., Ltd., MONTREAL.



THE EMPIRE ELASTIC BANDAGE

Specialty 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.

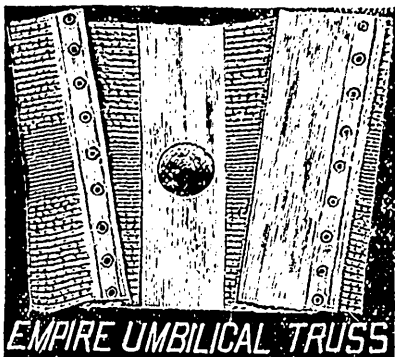
3rd. ITS ABSORBENT PROPERTIES—greatest in the "Empire."

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.

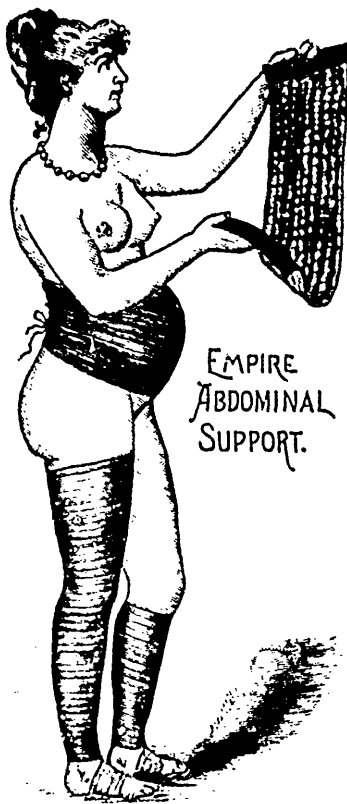
Send \$1.00 for 3 in. by 5 yds. Bandage on approval.



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.



EMPIRE
ABDOMINAL
SUPPORTER.

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'Y.

13 Spring Street,
LOCKPORT, N.Y., U.S.A.

ANTI-ASTHMATIC—

- R. Tinct. opii 4.
- Ether sulphuric 8.

M. Sig.: About fifty drops every twenty minutes in attacks of asthma with emphysema.—*Clymer.*

HOW TO TAKE CARE OF THE EYES.—Do not read or study by a poor light. Let the illumination come from the side, slightly back, but not from in front. Do not read or study long at a time while suffering great bodily fatigue or during recovery from illness. Do not read while lying down. Do not use the eyes too long at near work, but when weary give them periods of rest and a bath in cool water with friction or massage. During study avoid the stooping position, or whatever tends to produce congestion in the head and face. Select books printed on

good, but not glazed paper, and well printed. As you value your eyes avoid the use of alcohol and tobacco. Take much exercise in the open air. Indoor life ruins more eyes than all the doctors can ever cure. Life at the seaside is favorable to good sight. Outdoor life in a wooded country also favors the eyes. The green grass and green landscape is good for the eyes. As you value your eyes, so keep your body strong. The eyes weaken as the body weakens. The eyes are the most precious of our sense organs, and once injured can never be quite as good as before.

~~TRADE MARK REGISTERED.~~

~~BARLEY CRYSTALS~~

~~New Diuretic, Rheumatism Tonic Cereal; also
Gluten Dyspepsia Flour, and Diabetes Flour.
Pamphlet and Cooking Samples Free.
Unrivalled in America or Europe. Ask Dealers, or
Write Farwell & Rhines, Watertown, N.Y., U.S.A.~~

For a PALATABLE
NATURAL
SALINE
APERIENT

Duncan & Water

Is positively not
approached by any
other water sold.

Procurable from best
dealers everywhere,
or address
proprietors.....

CALEDONIA SPRINGS,
ONTARIO.

Analysis, etc., on application.

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 Ave., Toronto.

**Attention—
Physi-
cians!**



We make a specialty of Phaetons for physicians, and our prices are a revelation.

BALL-BEARING Axles, with Rubber or Pneumatic Tires, when desired.

Our Art Catalogue explains. Send for it.

"You have saved me \$45, and my phaeton is just perfect," writes a well known physician.

The Columbus PHAETON Co., Columbus, O.

WHEELER'S TISSUE PHOSPHATES.

Wheeler's Compound Elixir of Phosphates and Gallsaya. A Nerve Food and Nutritive Tonic for the treatment of Consumption, Bronchitis, Scrophula, 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 Gallsaya 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 therapeutists.

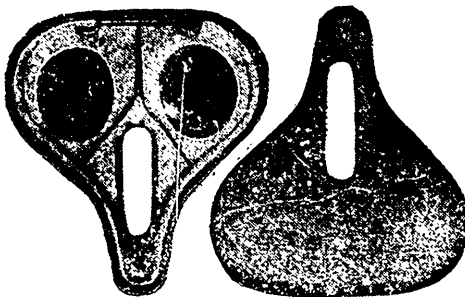
NOTABLE PROPERTIES. As reliable in Dyspepsia as Quinine in Arue. Secures the largest percentage of benefit in Consumption and all Wasting Diseases, by determining the perfect digestion and assimilation of food. When using it, Cod Liver Oil may be taken without repugnance. It renders success possible 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 tablespoonful three times a day, after eating; from seven to twelve years of age, one dessertspoonful; 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.



The "RAY" CYCLE SEAT

Commends itself especially to physicians because it is scientifically constructed upon nature's own lines. Exact impressions of the human anatomy have been obtained in modelling-clay by riders actually propelling a wheel, and from these impressions the models have been constructed, each model being a composite type representing the average physical conformation of a large number of people of about the same proportions. The base or tree is an aluminum casting, openings are left under the pelvic bones, these openings are bridged over with leather, a layer of the best wool felt being placed over and the whole covered with soft Goat, Kangaroo or Pigskin leather. All parts that physical injury is impossible. Satisfaction guaranteed. Special discount given to physicians for saddles for their own use.

under the perineum are cut out or depressed so that physical injury is impossible. Satisfaction guaranteed. Special discount given to physicians for saddles for their own use.

PRICE, \$5.00 EACH.

GORMULLY & JEFFERY MFG. CO., 939-945 Eighth Avenue, NEW YORK

THE Bennett & Wright Co., Limited

CONTRACTORS FOR

Steam and Hot Water Heating, Sanitary Plumbing,
Gas and Electric Fixtures

72 QUEEN STREET EAST

* *

* *

TORONTO

Elliott Illustrating Co. •

Sati-faction Guaranteed.
25 Years' Experience.

PHOTOGRAPHERS, PHOTO-ENGRAVERS, DESIGNERS, WOOD-ENGRAVERS, ETC.

If you require anything in our line write for prices and suggestions,
which will be cheerfully given. Best methods. Low Prices.

Illustrations of all kinds
for advertising purposes.

31 KING STREET EAST, - - - TORONTO.

CUSTOM WORK A SPECIALTY.

355 YONGE STREET
TORONTO

A. MACDONALD,

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 : : : : :

Merchant Tailor.

RINGWORM OF THE SCALP.—In chronic cases an ointment of copper oleate, in the proportion of 1 part to either 4 or 9 parts of lard, is very efficient, a small quantity being thoroughly rubbed into the diseased patch night and morning. A good prescription is

R. Creasote gtt. viij.
 Ointment of copper
 oleate ʒ ss.—M.

This preparation is of avail also in ringworm of the face (or barbers' itch) and body. In more stubborn cases it is well to make use of an ointment containing 5 per cent. of mercuric oleate or the copper and the mercuric oleate may be employed in alternation.

NITROGLYCERINE, ten drops of a one one-hundredth solution, has been administered hypodermicly, in the complete asphyxia of drowning, with marvelous results.

A GREAT MISTAKE . . .

Anyone who does not see our selections in WALLPAPERS before purchasing, both in regard to price and quality, will make the mistake of his life.

Do not take our word for it—come and see.

THE BIG WALLPAPER HOUSE

436 Yonge Street

.... Opposite Carlton

MULLIN & MUIR

The Best Medicine

Is a pleasant trip
 over



CINCINNATI, HAMILTON & DAYTON RY.

OOOO

DETROIT AND TOLEDO

To Cincinnati, Dayton, Indianapolis.

THE GREAT SOUTH-BOUND SHORT LINE.

NEW ORLEANS, THE CAROLINAS, FLORIDA.

We are a Half a Day the Shortest Line.

OOOO

For information write to

D. S. WAGSTAFF, General Northern Agent, DETROIT, MICH.

C. G. WALDO, General Manager.

CINCINNATI, O.

D. G. EDWARDS, Pass. Traffic Manager

THE WABASH RAILROAD

With its superb and magnificent through car service, is now acknowledged to be the most perfect railway system in the world. It is the great winter tourist route to the south and west, including the famous

Hot Springs of Arkansas,
Old Mexico, the Egypt of the New World,
Texas and California, the land of sunshine and flowers.

Passengers going by the Wabash reach their destination hours in advance of other lines.

The Wabash Santa Fe Special, leaving Chicago every Wednesday and Saturday at 6 p.m. and St. Louis same evening at 9 p.m., reaching Los Angeles in just three days. This the best California service in existence.

Full particulars from any railroad agent, or

J. A. RICHARDSON, Canadian Passenger Agent,

North-east corner King and Yonge Streets, TORONTO.

Confederation Life Association



HEAD OFFICE, TORONTO

YOU will feel better off in every way if you have underneath you the all-sustaining arms of Life Insurance. A Policy not only affords the best security, but actually dispels care, and so by lessening friction increases the length of life. The Unconditional Accumulative Policy issued by the Confederation Life Association provides for extended insurance, paid-up policies and cash surrender values, and is in fact a model contract. For full particulars send to the Head Office, or to any of the Company's Agents.

W. C. MACDONALD,

Actuary.

J. K. MACDONALD,

Managing Director.

The Universal Multi-Nebular Vaporizer

FOR OFFICE USE

In the treatment of all diseases
of the

Respiratory Organs
and Middle Ear

BY TEN DIFFERENT METHODS

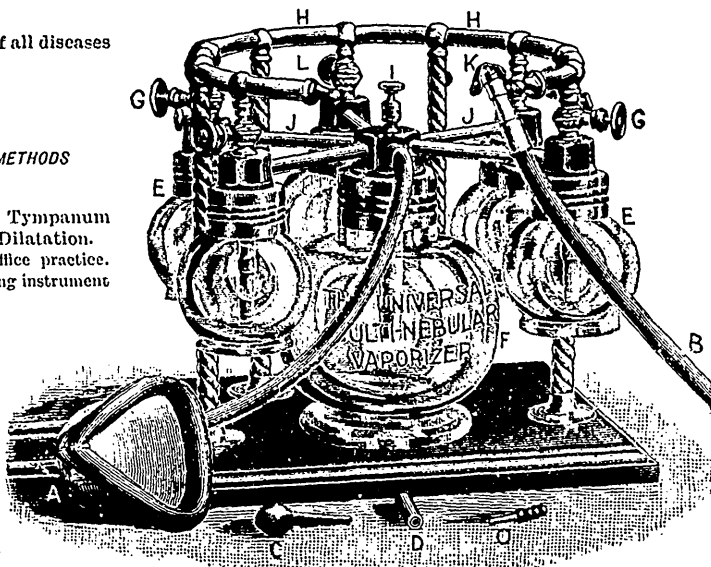
INCLUDING

Vapor Massage of the Tympanum
and Forced Pulmonary Dilatation.

Is indispensable in office practice.
Write for circulars describing instrument
and methods of use.

**GLOBE
MFG.
CO.,**

**Battle Creek,
Mich., U.S.A.**



CANADIAN AGENTS :: :: :

The S. B. CHANDLER, SON & CO., Ltd., Confederation Life Building, TORONTO.

RUSH MEDICAL COLLEGE.

Medical Department of Lake Forest University.

FACULTY.

EPHRAIM INGALS, M.D., Emeritus Professor of Materia Medica and Medical Jurisprudence.

DR. LASKIE MILLER, Ph.D., M.D., Emeritus Professor of Obstetrics and Diseases of Children.

EDWARD L. HOLMES, A.M., M.D., Pres't., Professor of Diseases of the Eye and Ear, 31 Washington Street.

HENRY M. LYMAN, A.M., M.D., Professor of the Principles and Practice of Medicine, 200 Ashland Boulevard.

JAMES H. ETHERIDGE, A.M., M.D., Secretary., Professor of Obstetrics and Gynecology, 31 Washington Street.

WALTER S. HAINES, A.M., M.D., Professor of Chemistry, Pharmacy and Toxicology, Rush Medical College.

J. NEVINS HYDE, A.M., M.D., Professor of Skin and Venereal Diseases, 240 Wabash Avenue.

NORMAN BRIDGE, A.M., M.D., Professor of Clinical Medicine and Physical Diagnosis, Los Angeles, Cal.

ARTHUR DEAN BEVAN, M.D., Professor of Anatomy, Rush Medical College.

NICHOLAS SENN, M.D., Ph.D., Professor of the Practice of Surgery and Clinical Surgery Rush Medical College.

JOHN B. HAMILTON, M.D., LL.D., Professor of the Principles of Surgery and Clinical Surgery, Rush Medical College.

DANIEL R. BROWER, M.D., Professor of Mental Diseases, Materia Medica and Therapeutics, 34 Washington Street.

TRUMAN W. BROPHY, M.D. D.D.S., Professor of Dental Pathology and Surgery, 86 State Street.

E. FLETCHER INGALS, A.M., M.D., Professor of Laryngology, 34 Washington Street.

The Regular Annual Session of Lectures will begin the last of September yearly, and will continue eight months. The requirements for entering the College and for obtaining the degree are fully described in the annual announcement, which will be sent to any address upon application.

The Clinical and Hospital facilities for instruction are unusually large.
For further information address the Secretary,

DR. J. H. ETHERIDGE,

1634 Michigan Ave., CHICAGO, ILL.