Technical and Bibliographic Notes / Notes techniques et bibliographiques

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

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

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

The Maritime Medical Rews,

(HALIFAX, NOVA SCOTIA)

A MONTHLY JOURNAL OF

MEDICINE and SURGERY.

VOL. V.—No. 11.

NOVEHBER, 1893.

Subscription \$1 per annum.

PANOPEPTON, Bread and Beef Peptone.

In Panopepton we present to the profession a new, complete and perfect peptone, one which we are confident will meet every requirement. Panopepton is the entire edible substance of prime, lean beef and best wheat flour, thoroughly cooked, properly digested, sterilised and concentrated in vacuo.

Panopepton is therefore the quintessence of peptones, containing all the nutrients of these two great types of food, beef and bread, fused into a delicious restorative.

Panopepton is the food par excellence in all conditions where a fluid, quickly assimilable, agreeable and comprehensive nutriment is required.

ORIGINATED AND MANUFACTURED BY

FAIRCHILD BROS. & FOSTER.

NEW YORK.

PULLIFIE BOWES & SONS, 142 HOLLIS ST., HALIFAX.

acediat of extin

the best antiseptic,

FOR BOTH INTERNAL AND EXTERNAL USE.

RISTERINE.

Formula.—Listerine is the essential antiseptic constituent of Thyme, Eucalyptus, Baptisia, Gaultheria and Mentlua arvensis, in combination. Each fluid drachm also contains two grains of refined and purified Benzoboracic 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 known antiseptic agent—an antizymotic—especially useful in the management of catarrhal conditions of the nucous 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, irrigation, atomization, or simple local application, and therefore characterized by its particular adaptability to the field of

PREVENTIVE MEDICINE-INDIVIDUAL PROPHYLAXIS.

Physicians interested in LISTERINE will please send us their address, and receive by return mail our new and complete pamphlet of 36 pages, embodying:

A Tabulated "xhibit of the action of LISTERINE upon inert Laboratory Compounds;

Full and Exicastive Reports and Clinical observations from all sources, confirming the utility of LISTERINE as a General Autisoptic for both internal and external use; and particularly

Microscopic Observations, showing the comparative value and availability of various antiseptics in the treatment of Diseases of the Oral Cavity. by W. D. MILLER, A. B., PH. D., D. D. S., Professor of Clinical Dentistry, University of Berlin, from whose deductions LISTERINE appears to be the most acceptable prophylactic for the care and preservation of the teeth.

Diseases of the Uric Acid Diathesis.

LITHIATED HYDRANGEA.

KIDNEY ALTERATIVE-ANTI-LITHIC.

Formula.—Each fluid drachmof "LithiLted Hydrangea" represents thirty grains of Fresh Hydrangea and three grains of offensional 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).

Urinary Calculus, Gout, Rheumatism, Bright's Disease, Cystitis, Homaturia Albuminuria and Vesical Irritations generally.

WE HAVE had prepared for the convenience of Physicians Directic Notes, suggesting the articles of food to be allowed or prohibited in several of these diseases.

These Dietetic notes have been bound in the form of small perforated slips for Physicians to distribute to their patients. Mailed gratis upon request together with our latest compilation of cases, reports and clinical observations, hearing upon the treatment of this class of diseases.

Lambert Pharmacal Company.

SAINT LOUIS, U. S.

RHEUMATISM.

Dietetic Note.—A fruit and vegetable diet is most favourable for patients with chronicrheumatic trouble.

ALLowed .- Beef and mutton in modera-

tion, with horse radish as a relish; fish and eggs, green vegetables, and fruit especially leanons. The skimmed milk diet has been advocated by some authors.

Avon.—Starchy and saccharine food:

all malt liquors, wines and coffee.

LISTERINE AND LITHIATED HYDRANCEA

MAY BE OBTAINED FROM

BROWN & WEBB, of Halifax, or from our Canadian Agent, W. LLOYD WOOD, of Toronto. British Agents, S. MAW, SON & THOMPSON London.

UNIVERSITY OF TORONTO.

MEDICAL FACULTY

PROFESSORS, LECTURERS and DEMONSTRATORS

J. H. RICHARDSON, M. D., Tor, Professor of Anatomy.

A. PRIMROSE, M. B, C. M., Edin , Associate Professor and Demonstrator of Anatomy.

H. WILBERFORCE AIKINS, B. A., M. B., Tor., Lecturer in Anatomy.

W. B. THISTLE, M. D., Tor.

F. N. G. STARR, M. B., Tor.

F. W. CANE, M. B , Tor,

Assistant Demonstrators of Anatomy.

A. R. GORDON, M. B., Tor.

W. T. AIKINS, M. D., Tor., LL. D., Professor of Surgery.

L. McFARLANE, M D., Tor., Professor of Clinical Surgery.

I. H. CAMERON, M. B., Tor., Professor of Clinical Surgery.

G. A. PETERS M. B., Tor, Associate Professor of Surgery and Clinical Surgery.

JOHN CAVEN, B. A., M. D., Tor., Professor of Pathology.

J. E. GRAHAM, M. D., Tor., Professor of Medicine and Clinical Medicine.

A. McPHEDRAN, M. B., Tor., Associate Professor of Medicine and Clinical Medicine.

W. B. CAVEN, M. B., Tor., Lecturer in Clinical Surgery.

JAMES M. McCALLUM, B A., M. D., Tor.. Professor of Pharmacology and Therapeutics.

O. R. AVISON, M. D., Tor., Demonstrator of Materia Medica and Elementary Therapeutics. UZZIEL OGDEN, M. D., Tor., Professor of Gynœcology.

A. H. WRIGHT, B. A., M. D., Professor of Obstetrics.

R A. REEVE, B. A., M. D., Tor., Professor of Ophthalmology and Otology.

G. H. BURNHAM, M. D., Tor., Clinical Lecturer in Ophthalmology and Otology.

GEO. R. McDONAGH, M. D., Tor., Lecturer in Laryngology and Rhinology.

W. OLDRIGHT, M. A., M. D., Tor., Professor of Hygiene.

W. H. ELLIS, M. A., M. B., Tor., Lecturer in Toxicology.

BERTRAM SPENCER. M. D., Tor., Medical Lecturer in Medical Jurisprudence.

HON. DAVID MILLS, LL. B., Q. C., Legal Lecturer in Medical Jurisprudence.

DANIEL CLARK, M. D., Tor., Extra Mural Professor of Medical Psychology.

R. RAMSAY WRIGHT, M. A. B. Sc., Edin., Professor of Biology.

A. B. McCALLUM, B. A., M. B., Tor., Ph. D. Johns Hopkins, Professor of Physiology.

WM. H. PIKE, M. A., PH D., Professor of Chemistry.

W. H. ELLIS, M. A., M. B., Tor., Lecturer in Chemistry.

W. L. MILLER, B. A., Ph. D., Demonstrator of Chemistry.

JAMES LOUDON, M. A., Professor of Physics.

The regular course of instruction will consist of four Sessions of six months each, commencing October 1st.

There will be a distinct and separate course for each of the four years.

The lectures and demonstrations in the subjects of the First and Second years will be given in the Biological Laboratory and the lecture rooms of the University.

Lectures and demonstrations in the subjects of the Third and Fourth years will be given in

the building of the Medical Faculty, corner of Gerrard and Sackville streets.

Clinical teaching (largely bedside) in the Toronto General Hospital, Burnside Lying-in Hospital, and other medical charities of Toronto.

Fees.—Lectures and Demonstrations: 1st year, \$75; 2nd year, \$75; 3rd year, \$85; 4th year, \$85. Registration for Lectures, \$5.00. Registration for Matriculation, \$5.00. Annual Examinations, each \$5.00. For Examinations in Practical Chemistry, 50c. For admission ad cundem statum, \$6. Degree, \$20.00. Hospital Perpetual Ticket, \$24.00. Lying-in Hospital Perpetual Ticket, \$24.00. pital, \$8.00. W. T. AIKINS, M. D., LLD., Dean.

JAMES BREBNER, B. A., Registrar.

MEDICAL MEN

WHO prescribe Cod Liver Oil in the form of Emulsion are urged to consider the claims and merits of

PUTTNER'S EMULSION.

This is the first of these preparations, having been introduced to the profession about 1876, and it has not been excelled by any of its successors or imitators. As now made by us, exclusively from Norwegian oil, it is free from all objectionable flavor, palatable and acceptable, even to delicate stomachs. It is rich in oil, partially predigested by pancreatine, contains the full proportion of hypophosphites, and while the dose is the same the bottles are one-third larger than most others sold at the same price,—a point of importance to the patient on the score of economy.

Free samples for trial gladly furnished to any physician.
Hospitals and Institutions supplied with the preparation in bulk at reduced prices.

BROWN & WEBB,

Established

LEITH HOUSE.

1818.

KELLEY & GLASSEY,

(SUCCESSORS A. MCLEOD & SONS)

Wine and Spirit Merchants.

importers of ALES, WINES AND LIQUORS.

Among which is a very superior assortment of

Port and Sherry Wines, Champagnes, Bass's Ales, Gainness's Stout, Brandies, Whiskies, Jamaica Rum, Holland Gin, suitable for medicinal purposes: also, Sacramental Wine, and pure Spirit (65%) for Druggists.

McGILL UNIVERSITY, Montreal,

Faculty of Medicine.

Sixty-First Session, 1893-94.

FACULTY.

SIR WILLIAM DAWSON C. G. M., Lt. D., F. R. S., Emeritus Principal and Professor of Natural History. ROBERT CRAIK, M. D., Dean of the Faculty.

EMERITUS PROFESSORS.

W. WRIGHT, M. D., L. R. C. S., DUNCAN C. McCALLUM, M. D., M. R. C. S. E., G. E. FENWICK, M. D. **PROFESSORS**

ROBT. CRAIK, M. D., Prof. of Hygiene and Pub.

G. P. GIRDWOOD, M. D., M R. C. S. Eng., Prof. of Chemistry.

THOS. G. RODDICK, M. D., Professor of Surgery and Clinical Surgery.

Clinical Surgery.
WILLIAM GARDNER, M. D., Professor of Gynacology,
F. J. Shepherd, M. D., M. R. C. S., Eng., Professor
of Anatomy and Librarian of the Faculty
F. BULLER, M. D., M. R. C. S., Eng., Professor of
Ophthalmology and Otology.
James Stewart, M. D., Prof. of Medicine and

Clinical Medicine.

GEORGE WILKINS, M. D., M. R. C. S., Professor of Medical Jurisprudence and Lectureron Histology D. P. PENHALLOW, B. SC., Professor of Botany. T. WESLEY MILLS, M. A., M. D., L. R. C. P., London,

WESLEY MILLS, M. A., M. D., L. R. C. P., London, Professor of Physiology,
 JAS. C. CAMERON, M. D., M. R. C. P. I., Professor of Midwifery and Diseases of Infancy.
 R. F. RUTAN, B. A., M. D., Assistant Professor of Chemistry, and Registrar of the Faculty.
 JAS. BELL, M. D., Assistant Prof. of Surgery and Clinical Surgery.
 J. G. ADAMI, M. A., M. D., Cantab. Prof. of Pathology.

logy. G. W. Major, B. A., M. D., Prof. of Laryngology

LECTURERS.

T. JOHNSON ALLOWAY, M.D., Lecturer in Gynaco-

ogy. F. G. FANLEY, M.B., (Lon.), M.D., (McGill), Lecturer ir Medicine and Clinical Medicine.

H. S. BIRKETT, M.D., Lecturer in Laryngology and Senior Demonstrator of Anatomy.

HENRY A. LAPLEUR, B.A., M.D., Lecturer in Medicine and Clinical Medicine.
GEO. ARMSTRONG, M.D., Lecturer in Surgery and

Clinical Surgery.

J. W. BURGESS, M.D., Lecturer on Mental Diseases.

DEMONSTRATORS & ASSISTANT DEMONSTRATORS.

WH.R.SUTHERLAND, M.D., Demonstrator in Surgery. WHATT JOHNSTON, M.D., Demonstrator in Bacterio-

logy. N. M. Elder, B.A., M.D., Assistant Demon-Jenn strator in Anatomy.

J. G. McCarthy, B.A., M.D., Assistant Demonstrator in Anatomy.

D. J. Evans, M.D., Assistant Demonstrator in Obseterics.

N. D. Gunn, M.D., Assistant Demonstrator in Histo-

logy. W. S. Morrow, M.D., Assistant Demonstrator in Physiology.

R. C. KIRKPATRICK, B.A., M.D., Assistant Demonstrator in Surgery. C. F. Martin, B.A., M. D., Assistant Demonstrator

in Bacteriology.

The Collegiate Courses of this School are a Winter Session, extending from the 1st of October to the end of March, and a Summer Session from the end of the first week in April to the end of the first week in July, to be taken after the third Winter Session.

The sixty-first session will commence on the 3rd of October, and will be continued until the end of the following March; this will be followed by a Sammer Session, commencing about the middle of April and

ending the first week in July.

Founded in 1824, and organized as a Faculty of McGill University in 1829, this School has enjoyed, in an

unusual degree, the confidence of the profession throughout Canada and the neighbouring States. One of the distinctive features in the teaching of this School, and the one to which its prosperity is largely due, is the prominence given to Clinteal Instruction. Based on the Edinbergh model, it is chiefly Red-side, and the student personally investigates the cases under the supervision of special Professors of Clinical Medicine and Surgery.

The Primary subjects are now all taught practically as well as theoretically. For the department of Anatomy, besides a commodious and well-lighted dissecting room, there is a special anatomical museum and a bone-room. The other branches are also provided with large laboratories for practical courses. There is a Physiological Laboratory, well-stocked with modern apparatus; a Histological Laboratory, supplied with thirty-five microscopes; a Pharmacological Laboratory; a large Chemical Laboratory, capable of account of the control of the contr of accommodating 76 students at work at a time.

Besides these, there is a Pathological Laboratory, well adapted for its special work. It is a separate building of three stories, the upper one being one large laboratory for students 48 by 40 feet. The first flat contains the research laboratory, lecture room, and the Professor's private laboratory, the ground floor being used for the Curator and for keeping animals.

Recently extensive additions were made to the building and the old one remodelled, so that besides the

Laboratories, there are two large lecture-rooms capable of scatting 300 students each, also a demonstrating room for a smaller number. There is also a Library of over 15,000 volumes, a museum, as well as readingrooms for the students.

To the recent improvements that were made, the comfort of the students was also kept in view.

MATRICULATION.—Students from Ontario and Quebec are advised to pass the Matriculation Examination of the Medical Councils of their respective Provinces before entering upon their studies. Students from the United States and Maritime Provinces, unless they can produce a certificate of having passed a recognized Matriculation Examination, must present themselves for the Examination of the University on the first Friday of October or the last Friday of March.

HOSPITALS.—The Montreal General Hospital has an average number of 150 patients in the wards the majority of whom are affected with diseases of an acute character. The shipping and the large manufactories contribute a great many examples of accidents and surgical cases. In the Out-door Department there is a daily attendance of between 75 and 100 patients, which affords excellent instruction in minor surgery, routine medical practice, veneral diseases, and the diseases of oliders. Clinical clerkships, and dresserships can be obtained on application to the members of the Hospital staff. The Royal Victoria Hospital, with 250 beds, will be opened in September, 1893, and students will have free entrance into its wards. wards.

REQUIREMENTS FOR DEGREE.—Every candidate must be 21 years of age, having studied medicine curing four six months Winter Sessions, and one three months' Summer Session, one Session being at this School, and must pass the necessary examination.

For further information, or Annual Announcement, apply to R F. RUTTAN, M.D., Registrar Medical Faculty, McGill College.

NOW IS THE TIME TO USE

PEPTONIZED BEEF AND ALE

THE GREATEST STRENGTHENING TONIC.

Why Thousands of Physicians Prescribe It.

- "A boon to the Medical Profession."-J. Milner Fothergill, M. D., London, Eng.
- "Of special value to nursing mothers."-J. N. Love, M. D., St. Louis.
- "Valuable to my La Grippe patients."- Jnc. B. Hamilton, M. D., Chicago.
- "As a Nutrient Tonic it has no equal."-T. J. Yarrow, M. D., Philadelphia.
- "The desired article in vomiting of pregnancy."-Drs. Hawley & Hawley, College Corner.
- "It is a great Builder without a doubt."-W. C. Wile, A. M., M. D., Danbury.
- "I get better results from it than from any other nutrient."-Wm. Porter, M. D., St. Louis.
- "It is an essential and admirable remedy in exhaustive stages of diseases."—S. D. Richards, M. D., Detroit.
 - "I endorse it as a real food of great value."-E. Chanceller M. D., St. Louis.
 - "It has more virtues than you claim for it."-James P. Prestley, M. D., Chicago.

FOR SALE BY ALL DRUGGISTS.

MEMORANJUM FROM

PLES MAILED IN "VEST POCKET BOX."

PLAINFIELD.

J. B. PROBASCO, M. D.

NEW JERSEY,

Clears accept my thanks for the very was as useful sample and hely as well as useful sample and house was dealed with the good on the antikamnia chemical co., st. Louis, mo., for like sample; and to secure like results, see that general in genuine antikamnia is dispensed on your prescriptions. Tablet sam-

The Maritime Medical News,

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

Vol. V.

HALIFAX, N. S., NOVEMBER, 1893.

No. 11.

- CONTENTS.

Original Communications: Excision of the Knee, by Dr. N. E. McKay171 Ligature of External Hiac Artery, by G. H Cohurn, M.D	EDITORIALS: Convocation Halifax College
Society Proceedings: St. John Medical Society	CORRESPONDENCE: Trip to Montreal, by Dr. Hattie186

EXCISION OF THE KNEE.

WITH A REPORT OF TWELVE CASES. By N. E. McKAY, M. D.

Read at the 3rd Annual Meeting of the "Maritime Medical Association," at Charlottetown, P. E. I., July 13 1893.

Before proceeding to the subject proper of my paper it may not be uninteresting to refer to the first operation of excising the knee that was performed in the Meath Hospital, Dublin, as it will serve to illustrate the progress made since then in the surgery of the knee. It was performed by a surgeon named Crompton. A description of the operation as performed is given by a writer in the Lancet of 1825, Vol. 6, p 29:—

"We happened to be present some time back at one of the those scenes of scientific butchery at the Meath Hospital. The patient was a female: the complaint, if we recollect rightly, open scrofula of the knee-joint. A great concourse assembled to witness the operation: it was quite a gala day with the dissectors—a festival seemingly, held in honour of the virtue of steel. It was the first time, we believe, that the removal of the knee-joint was attempted here. We earnestly hope

it will be the last. The operator, of course, accomplished his purpose with his usual dexterity, but could he have beheld as we did, the contorted countenances of the spectators, the knife would have fallen from his hand, never to be used where it was not more imperiously indicated. To be present was indeed a torture. One man vented his feelings in a wink, a second in a "hem" a third overcame his sympathies in a forced fit of laughter, all, to be sure admired, but all disapproved. We saw this poor creature a long time after endeavouring to drag her limb with her by means of sundry wooden contrivances, let it be called by what name the sanguinary desperadoes of the profession choose, but we shall never be cheated out of our judgment, or fear to expose such practice when it falls under our observation."

In 1859, 30 years later we find the eminent surgeon Mr. Symes denouncing the operation in strong terms. He characterized, it as "a bloody and dangerous operation." His hostility towards it serves further to illustrate the progress made in the science of surgery during the last quarter of the century. Sir W. Ferguson of London and Mr. Butcher of Dublin by their success

placed the operation on a sure foundation. But notwithstanding the success of these eminent surgeons, I am of opinion that most surgeons nowaday would shrink from throwing open so important a joint as the knee were it not for Sir Joseph Lister's invaluable labours in aseptic, and antiseptic surgery. By his success in removing septic matter in the treatment of wounds he has rendered operations about joints almost absolutely free from danger.

The propriety of excising the kneejoint in suitable cases is now admitted by most surgeons. Many limbs are now saved by excision and erasion which 13 or 14 years since would have been amputated. In University College, London, 10 years ago about 13 per cent of the operations performed were amputations while to-day they form only 2 per cent. This shows the rapid progress made in conservative surgery of joints within the last decade. The greater proportion of this reduction may safely be attributed to the substitution of excision and erasion for amoutation.

Before proceeding with the report of my cases I shall give a brief description of the operation as I perform it together with that of the splint I usually use, any departure from the general method of operation will be recorded

with each particular case.

Preparation of Part.—An hour or two before the operation is performed the knee and parts in its immediate neighbourhood are washed well first with soap and water and scrubbed by a skinbrush, and afterwards with carbolic acid solution 1-20; and the joint is kept wrapped in a piece of lint soaked with carbolic solution 1-40 up to the time of the operation. After the tourniquet is put on and before the joint is laid open the part is again washed with a 5% carbolic solution.

Technique of Operation.—There are different methods of opening the joint. I always use the transverse incision removing the patella and I believe it is

the best. The incision is begun at the back of one condyle and carried in front of the joint in a curved direction below the patella and ends at the back of the other condyle. This incision throws the joint wide open. The knee being now well flexed by an assistant the patella is removed and the diseased synovial membrane is dissected away carefully and completely. The head of the femur is protruded through the wound and the crucial ligaments, if intact, detached and the intercondyloid notch is cleansed of every vestige of pulpy or diseased tissue. Care is exercised here on account of the close proximity of the popliteal artery. Thehead of the femur being thoroughly cleansed a thin section of bone is removed therefrom so as to make the sawn surface convex. The condyles are cut of equal length, this enables me to adjust the bones with greater accuracy. oneslice not remove the disease entirely a second and even a third is removed. If separate centres of disease or an undetached sequestrum exist in the head of the femur or tibia they are removed by the curette and goudge.

The head of the tibia now receives attention; it is pushed forward through the wound and every appearance of pulpy or diseased tissue carefully and completely removed including the semilunar cartilages, a thin slice is then removed from the head of the tibia making its sawn surface concave; this is made to fit accurately the convex head of the femur. By removing thin sections of bone from the head of tibia and femur in this manner there is no unnecessary sacrifice of substance and there is less danger of encroaching upon the epiphysial line and hence of subsequent shortening of the limb. is of eminent importance in young children. In the adult the amount of shortening will scarcely be noticed. Most surgeons square off the ends of the bones, this is sure to remove the epiph ysis in whole or in part and much short ening of the limb is bound to result.

If chronic sinuses are present they are carefully and well curetted with a Volkmann spoon and injected with chloride of zinc solution 1-40. every particle of diseased tissue is removed the wound is thoroughly flushed with an antiseptic solution generally carbolic acid 1-40 and cleansed of every shred and tag. The bones are now accurately adjusted and the limb is put up in the splint with plaster of paris and paraffin. The wound is temporarily covered with gauze while this is being done. While the operation is being performed the part is surrounded with towels saturated with carbolic solution which are replaced as soon as soiled by clean ones.

Hemorrhage,—This is a very important part of the operation as the more completely the bleeding is arrested the better the after results. Much oozing after the wound is closed enhances the danger of suppuration. Such has been my experience—Free oozing in case No. 8 caused free and troublesome suppuration. I secure all the bleeding points by a cat-gut ligature. Some vessels are difficult to get at owing to their position these I under-run with fine cat-gut chromicized, and to stop the general oozing I use sponge pressure

and very hot water.

Should the Bones be Pegged or Wired to keep them in position?-I am decidedly opposed to the use of pegs. have used them in S of my cases and I must say I am very unfavourably impressed with their use as in nearly every case they caused more or less irritation and in one they produced free suppuration which resulted in the loss of the limb. I have no experience with the use of the wire. However, I am convinced that neither peg nor wire is necessary to keep the bones in position providing their articular surfaces are treated in the manner already described. The convex surface of the femur interlocks in the concave surface of tibia. This interlocking of the bones together with the splint I use will keep the bones firmly and accurately in position without the aid of wires or pegs.

Drainage. I usually insert a medium size rubber drainage tube behind the hones with its ends projecting below through a counter opening in the popliteal space, and one in front on each side of the joint extending from the supra-patellar pouch to the angles of the wound. The anterior tubes are dispensed with in some cases. This will depend on whether there is much oozing, if there is, I insert them and remove them in 24 or 26 hours, if there is not, I dispense with them. As a general rule I leave the posterior tube undisturbed for 10 or 12 days, when if the case is doing well I remove it, but should suppuration occur or be threatened the tube is left in. The drainage tubes are cut flush with the skin.

Form of Splint,-The form of splint. I usually use consists of two interrupted troughs of thin sheet-iron-one for the thigh, the other for the leg-connected behind with one or two iron rods 4 to 6 in. long, the length varies according to age of patient: attached to this is an adjustable foot-piece. splint extends up to the nates. This part is for the back of the limb. the front of the limb I use a suspensory rod. This rod extends from the groin to the toes, at the ankle it is bent soas to adjust it to the dorsum of the foot, and there is an arch over the knee to enable the wound to be dressed. One ring is inserted in the rod near the ankle and another in the thigh piece. These are to suspend the limb by a cord and pulley in a Salter's swing. Tne splint is padded with cotton wool covered with MacIntosh or oiled linen and it is applied with plaster of paris and paraffin. The trough part of the splint I used in my last case was made of tinned iron and the splint was padded with lint soaked with paratfin and it was applied with paraffin bandages.

This splint insures greater steadiness between the bones and greater comfort to the patient than can be obtained by any other. It enables the patient to move his body without disturbing the bones at the seat of section. The ability to move in bed without disturbing the bone makes the confinement less irksome and bed-sores will less likely occur.

The Dressing,—I invariably leave the wound open until the splint is put on, as this enables me to correct any displacement of the bones which may occur while the splint is being applied. The wound is usually closed with silk sutures. My first 5 cases were dressed after that of Lister's dressing: The next 5 were dressed with powdered Iodoform and Sal Alembroth gauze, and the remaining three with Iodoform and lodoform gauze, all were packed with absorbent cotton wool. I usually put a very narrow strip of oiled silk over the edges of the wound, so as to prevent the gauze from becoming entangled in the sutures, this will remove the danger of irritating the wound when the dressing is changed. The blood stained dressing I usually remove the day after the operation, and if the case does well as indicated by the temperature chart the second dressing is left untouched for 10 or 12 days when it is removed and the stitches are taken out as is also the drainage tube. Afterwards the dressing is changed as often as the circumstances of the case indicate.

When to operate,—Mr. Croft would excise as soon as suppuration occurs without making himself certain as to the condition of the joint.

Mr. Barker says that the joint should be removed as soon as it is suspected that caseation is advancing in it.

I am of the opinion that excision should be performed as soon as a pulpy condition is detected and while the state of the joint and the general condition of the patient are alike favourable.

On the 3rd of May last I addressed the following letter to each patient:—

The answers received I shall append to their respective reports:

Dear—"Will you kindly let me know how your knee has been doing since it was operated on? Has it given you any trouble since, and can you walk without much inconvenience?"

REPORT OF CASES.

CASE No. 1.

G.— O.— aged 22, a fairly healthy young man, was admitted to the P. & C. Hospital Nov. 18th, 1885, suffering from tubercular knec-joint disease of four years standing. The following history was elicited:—

Was well until four years ago; trouble began with slight pain and stiffness of the joint; this got gradually worse; came to the Hospital for treatment in March, 1884; was treated by the expectant plan and the actual cautery; was discharged improved same year. From then until he was readmitted, in Oct., 1885, he was able to go about without the aid of crutches, but was unable to bend his knee.

When admitted in 1885 the knee was swollen and doughy and painful and slightly flexed; motion limited; head of the tibia displaced a little backward and outward; local temperature slightly increased. Treated him on the expectant plan for the first four months; no improvement resulted; he had now painful spasms of the limb at night and marked lateral motion of the joint with crepitation. On the third of Feb. 1886 I excised the knee. The operation was performed under a spray of carbolic acidand with full antiseptic precautions; the knee was opened by the transverse incision below the patella. The synovial membrane was a mass of gelatinous pinkish grey substance; the condyles of femur and head of tibia denuded of cartilage; a small sequestrum in the inner condyle and an abscess in outer condyle containing pus and debris. vestige of diseased tissue was thoroughly removed from the joint including the

patella and a thin section of bone was cut off the end of the femur and tibia as already described.

After securing all the bleeding points and douching the wound thoroughly with carbolic solution, the bones were accurately adjusted and the limb put up on the splint with plaster of paris and paraffin. Free drainage was provided and the wound was dressed with a Lister's dressing; changed the bloodstained dressing the following day. The highest temperature registered was 100 degrees on the third day. Dressed wound again on 10th day and removed nearly all the stitches.

Took off the splint on the 10th of March, the 44th day after the operation, and found firm bony union had occurred. A plaster of paris splint was now put on, and he was allowed to go about on crutches. He was discharged well in June. There was 1 in. shortening of the limb. I received the following answer to my letter of the 3rd of

May:-

Lower LaHave, June 16th, '93,

DEAR SIR,—I feel perfectly well now, and can walk for days without feeling the least bit tired.

Respectfully yours,

GEO. OXLEY.

Case No. 2.

A. Oxner, a healthy school girl, aged 14, was admitted to the P. & C. H.—on the 2nd day of Dcc., 1886, suffering from tubercular knee-joint, disease of seven year's standing. She gave the following history:—

Knee began to trouble her when seven years of age: was a great sufferer the first year; the knee soon became flexed but was afterwards straightened by weights; was treated by the expectant plan for two or three years, and her condition improved; was able to go about on crutches for two years; but for two years before being admitted was unable to move; father and three aunts died with phthisis. Excised her

cousin's knee in Feb., 1887, for tubercular mischief.

Condition when admitted: right knee swollen and tender, and its motion very limited; increased lateral motion with crepitation; patella ankylosed; a chronic sinus on outer aspect of joint discharging thinnish pus.

I excised the knee on the 8th day of Dec. The operation was performed with strict antiseptic precautions. The sinus was curetted well with a Volkmann spoon, and injected with chloride of zinc solution 1-40; a drainage tube was inserted in the sions. The bones were then accurately adjusted, and the limb was put up on the usual splint; the wound was dressed after that of Lister's dressing. The first dressing was changed next day, and as often afterwards as the circumstances of the case indicated. The highest temperature registered was 100 degrees. The progress of the case towards recovery was very good. Patient was discharged well on the 10th Sept., 1887, 222 days after the operation. Amount of shortening of limb three-quarters to one inch. tient is now married. The following reply I received to my letter the 3rd of May :---

Halifax, May 16th, '93.

DEAR SIR,—My knee has not troubled me since the operation. I can walk as well as if nothing had ever happened it. I've not the least trouble with it. Yours.

A. OXNER.

CASE No. 3.

Geo. Fernando aged 23, a fisherman, was admitted to the P. & C. H—with disease of the left knee joint of two years duration. The following history was obtained:—

Was well until 2 years ago when he hurt his knee sawing wood; the joint soon became painful, tender, and swollen; in two months time he was obliged to take to his bed; blistered the knee but

no improvement resulted; later, painful spasms came on at night; was confined to bed for a year and a half.

When admitted the joint was swollen, painful and tender; motion limited; had nocturnal spasms; patient's health good; no history of phthisis in family.

Treated him for 2 or 3 months on the expectant plan; applied Scotts dressing; cauterized the knee; the cautery aggravated the mischief.

The joint was excised with full anti-

septic precautions.

At first the case appeared to do well but the temperature went up soon and free suppuration resulted. In spite of free incision and good drainage the matter burrowed its way into the popliteal space and up the thigh, so that eventually I had to amputate the thigh about its middle. Patient is at present living and well.

CASE No. 4.

Albert Outhouse, a healthy young lad, aged 15, was admitted to the P. & C. H—on 21st. of June, 1889, with a partially ankylosed knee at right angles, the result of trumatism History:—When 8 years old a cart went over his knee; had an attack of rheumatism subsequently; fell from a clift 5 years ago and struck his knee on a rock; acute inflamation resulted which lasted one year; knee became partially ankylosed at right angles; went about on crutches for 4 years.

On examination the knee was painless and partially ankylosed at right

angles; and the patella fixed.

On the 4th. of July tenotomy of the hamstring muscles was performed and the knee forcibly extended. A Buck's extension was put on and an ice-bag applied to the joint.

On the 31st of August, the knee was excised: the patella was detached by an osteotome and mallet and removed, and a thin section sawn off the femur and tibia in the usual way, and the limb put up as previously described.

Patient did remarkably well during the after treatment of the case. He was discharged well on Nov. 14th, 146 days after the operation. Amount of shortening 1 inch.

I received the following letter in answer to mine of the 3rd. of May, 93.

Tiverton Digby, Co,. May 27th, '93.

Dear Sir:—My knee is all right and can walk without any trouble only my leg is stiff, but all right otherwise I walk with it as well as ever.

" A. O."

CASE No. 5.

Maggie L—a domestic aged 20 was admitted to the V. G. H.—on the 23rd day of Nov. 1889 suffering from tubercular disease of the knee-joint. She was admitted in Dr. F's service who handed her to his successor Dr. B—They both treated her on the expectant plan and cauterized the knee two or three different times; no improvement resulted. The following history was elicited:—

Fell and hurt her knee when 9 years old; got well in a month; otherwise she enjoyed good health until 1888; when she slipped and wrenched her knee badly; since then she has had steady aching pain in joint; rested the joint for a year; with no improvement; she then came to the Hospital: became my patient in April 1890; condition:—knee painful, swollen and tender; motion limited; patella slightly novable; could not bear to have the knee touched.

Family history,—Grandfather on mother's side died of phthisis and two uncles and two aunts on father's side died of same disease. A sister died in

decline since the operation.

Her knee was excised on the 10th of June '90: dowels were driven in the bones to retain them accurately in position: The after treatment of the case was uneventful. The progress towards recovery was good: she was discharged well in Nov. 1890, 124 days after the

WYETH'S COMPRESSED TABLETS

- OF -

ANIMAL DIASTASE

(AMLYOPSIN.)

These Tablets are made from the starch-converting ferment of Pancreatic Juice, obtained from the pig and other domestic animals, and will be found of great value in the treatment of dyspeptic affections due to inability to digest the starchy elements of food. This form of indigestion is very troublesome at times, and is not relieved by the various preparations of Pepsin.

Animal Diastase, or Amylopsin, being the substance provided by nature for the purpose of digesting starch, is very active when properly purified and prepared, and converts the starchy portions of food-bread, etc .- into sugar and dextrine, which are readily soluble and consequently in a form capable of being immediately absorbed by the system.

One or two Tablets will give almost immediate relief from the discomfort frequently experienced after eating hot biscuits, cakes, waffles, etc., and should be taken shortly before or after meals. For children, one-half the above quantity should be given.

One-half a Tablet, crushed and mixed with a small quantity of water or milk, will be found

of great service to infants who are being fed upon the various infant foods so largely sold, nearly all of which contain large quantities of starch and are difficult of digestion in certain

cases. This dose should be given whenever there appears to be any of the food undigested.
Wyeth's Compressed Tablets of Amylopsin contain two grains each, and are coated with a

WYETH'S KOLA-NUT PREPARATIONS.

(STERCULIA ACUMINATA.)

INDICATIONS.

Dr. Shoemaker, A. M., M. D., in a clinical study of the subject, found Kola-Nur to be an excellent reconstituent tonic, and used it in a varity of cases, including neuralgia, anamia, ulnar neuritis, locomotor ataxia, gastro-intestinal irritability, pulmonary irritability, dyspepsia etc., and in the convalescence from severe ailments, such as typhoid fever, acute pneumonia or rheumatism, influenza, etc.

For the convenience of the profession we supply this remedy in the form of Compressed

Tablets, and also the Fluid Extract,

COMPRESSED TABLETS.

					· · · · · · · · · · · · · · · · · · ·
Five grains	ner	100			\$0.35
Ton grains	4 6	100			S0 10
Ton Stame,		**************************************	· · · · · · · · · · · · · · · · · · ·	• • • • • • • • • • • • • • • • • • •	

FLUID EXTRACT.

application.

JOHN WYETH & BROTHER, PHILA.

DAVIS & LAWRENCE CO., (Ltd.) Montreal, General Agents.

Arsenite of Copper for Choleraic Ailments.

WYETH'S
COMPRESSED
TABLET
TRITURATES.
ARSENITE
OF
COPPER.
1-100 GRAIN.
1-200 GRAIN.
1-3200 GRAIN.
PRICE SO CENTS
UPER BOTTLE OF

500.

We have received a large number of letters from physicians in all parts of the country confirming the experience of those mentioned on the attached circular, in cases of Cholera Morbus, Cholera Infantum, Dysentery, Diarrhoea, and other complaints of a similar nature.

It is claimed that Copper Salts have proven valuable in all the Cholera Epidemics within the last fifty years, and medical literature affords abundant confirmation of its great value in complaints of a chol eraic nature, many physicians also claiming that the Arsenite will prevent the development of those symptoms which so often lapse into Asiatic Cholera.

JOHN WYETH & BROTHER.

I was called to attend a lady, a resident of Savannah, Ga., who is on a visit here, on Friday morning, the twenty-third instant. I found her suffering intensely from paroxysmal pains of intestinal colic attended with diarrhoea. My patient declared that she could not live another hour unless relieved. I felt sure that I could relieve her pain by giving an injection of morphia and atropia, hypodermically, but would be apt to have a nauscated patient to look after the balance of the day, so I dissolved a tablet of the Arsenite Copper (one one-hundredth grain) in four ounces of water. Gave her the first teaspoon myself and begged her daughter to give another teaspoonful every ten minutes for the first hour, the none dose every hour after, until I called I went back in two hours time and found the patient sleeping. She was relieved after taking the third dose of the Arsenite. I requested her daughter to give a dose once each hour, and left with a promise to call again that evening. I found my patient up and feeling well at eight o'clock, and so much pleased with the treatment that she wanted to put the remaining portion of the solution in a phial to carry back home with her. She says that she is subject to these attacks of colic, and was never so easily and pleasantly relieved by any other form of treatment.

C. E. DUPONT, M. D.

Grahamville, S. C.

A. P. Brown, M. D., Fort Worth, Texas. writes us in reference to the above as follows.

Messrs. John Wyeth & Bro.

"Bloody Flux is very prevalent here, and these Tablets, 1.100 grain to four ounces of water surpass any other medicine we have used in arresting this painful and dangerous disease; its effects are simply wonderful, and it is no trouble to get a patient (even a babe) to take it. Tranks, many thanks, for your prompt reply to my requests for tablets, etc."

Recent medical literature confirms the practical experience of Dr. A. P. Brown in the use of this remedy, in serious dysenteric cases, with an additional therapeutic value in indigestion, diarrhea, etc.; also, as an antisudoral in the night-sweats of phthisical-patients.

DAVIS, LAWRENCE & CO.,

General Agents
MONTREAL.

P. S.—We direct your attention particularly to the Triturate 1-3201 Grain which has been specially prepared so as to give an exact dose without the trouble of dissolving.

operation. Amount of shortening 1 in. Patient has been at work for 3 years since operation. She can walk well with very little inconvenience and has no pain in the joint.

CASE No. 6.

Gertrude Halfkenny, married aged 31, was admitted to the V.G. H.on the 30th of Dec. 1890 with disease of knee joint of two years standing. She was always well until her present trouble began. It began with a swelling in her knee which after a while became painful: at first pain was slight: but for two years before she came to the Hospital she was a great sufferer. To use her own words "she suffered everything but death with the pain." She was treated by Dr. Black for three months on the expectant plan, and by me for two months: no improvement On the 7th of June '91 I followed. excised her knee. The wound was dressed with powdered iodoform and sal alembroth gauze. Two pegs were used to retain the bones in position. She made a good and rapid recovery. She has been at service in Boston for 1 or 2 years since. I received the following answer to my letter of the 3rd of May: -

Springhill Mines, June 19, '93.

Dear Sir,—I just came home last Tuesday from Boston. My knee has been perfectly well since the operation, It does not cause me the least inconvenience in walking, I can walk 10 miles with ease. The summer after the operation I walked to the Junction and back again, a distance of 10 miles and I did not feel the knee the least bit tired after it.

Respectfully yours, G. HALFKENNY.

CASE No. 7.

Annie Silver, a healthy young girl, aged 18, was admitted to the V. G. H. on 10th June, '90, with an ankylosed knee at right angles, and a running sore on the outer aspect of the

thigh immediately above the joint. Her knee troubled her ever since she was seven years old. It became swollen, painful and flexed at right angles: broke about 11 years ago, and has been discharging since; a splinter of bone came out of the wound 4 years ago; the patella is ankylosed. first performed a preliminary sequestrotomy, and on the 8th of August the knee was excised. Nearly the entire condyles had to be removed, and about half an inch of the tibia. fore the limb could be straightened. In consequence of the matting together the hamstring muscles by old inflammatory products, tenotomy of them could not be performed. patella was separated by the osteotome and mallet, as was also the vnion between the femur and tibia. case made a good recovery, and was discharged well on Dec. 5, '90, 118 days after the operation. She has been at service in Boston for the last 12 mos. Amount of shortening of limb 11 inches. To my letter of inquiry the 3rd of May, I received the following answer: --

Beverly, Mass, June 8, '93.

Dear Sir,—In answer to your letter about my knee, I may say that my limb has given me no pain since I left the Hospital. My leg swells occasionally. It gives me no trouble in walking at all. Respectfully yours,

ANNIE SILVER.

CASE No. 8.

W. Wilton, a healthy young man, aged —, was admitted on April 13, 1891, to the V. G. H. with an ankylosed knee nearly at right angles, the result of an incised wound of the knee; he gave the following history:—

Cut his knee with an axe nearly three years ago and acute inflammation set in in the joint: was confined to bed for 3 mos.: then went about on crutches for about a year, for the balance of the time with a cane.

excised the knee on the 19th of May. Separated the patella with an osteotome and mallet, and also the union between the femur and tibia. The wound was dressed with iodoform powder and sal alembroth gauze. Two pegs were used to retain the bones accurately in position. Free suppuration occurred, but it was easily controlled by free incisions. Patient did well afterwards, and was discharged cured on the 13th Sept., '91, 143 days after the operation-amount of shortening one inch and a quarter. Received the following letter from him in answer to mine of the 3rd of May:-

Kingston, King's Co., June 4, 1893.

DEAR SIR,—I must say I have a better leg than you ever promised me. I can walk as far a day as anyone I think, I never feel tired in this limb any more than the other. I walk every day and find no great inconvenience in getting around except in snow. It has never troubled me any since I came home, and it is a great improvement on the way it was when you operated. I feel as strong on it as on the other, I can jump my whole weight on it and feel no weakness in it.

Yours sincerely,

W. H. WILTON.

CASE No. 9.

Alvin Publicover, a hairdresser aged 25. was admitted to the V. G. Hospital on the 6th, of April '92 suffering from knee-joint disease of 10 years duration. The following history was obtained: 10 years ago he hurt his knee by jumping off a wall: laid up for a month; injured the joint some time after this and it has pained him ever since: saw him for first time in April, 1889: his knee was then swollen, slightly tender and stiff: he was very lame. Treated him on the expectant plan for 7 months; cauterized the joint: no improvement followed: the knee continued getting worse: in Dec. '91 it broke on the outer aspect of the thigh, a little above

the joint and discharged matter freely and continued discharging until the operation was performed. When admitted the joint was swollen, doughy and painful and tender to the touch: motion limited: patella fixed: could walk a little with a crutch and cane: all his uncles and aunts died with phthisis, and one sister died since of this disease. His general health was good.

On the 12th, of April I excised the knee. The sinus was curetted well and injected with zinc chloride solution 1-40. The wound was dressed with iodoform and sal alembroh gauze, dry Dowels were inserted in the ends of the bones to keep them in position. The progress of the case was slow, but he made a good recovery.

He was re-admitted to the Hospita in April of this year for suppurative arthritis of the tibio-fibular joint. Cut down on the joint under an anaesthetic and curetted it well and injected it with chloride of zinc solution 1-40. He is now doing well and will soon be discharged.

CASE No. 10.

Mrs. J. M—a domestic aged 30 was admitted to the V. G. H.—in Doctor Black's service in March, '92 with a painful and swollen knee of 2 years duration. History elicited:

Enjoyed good health until 10 years ago when from much kneeling she had Bursitis: Henceforward her knee by turns was weak, stiff and painful: two years ago she took to bed: blistered her knee, this gave no relief. On the 20th, of March Dr. B-cauterized the joint; no improvement resulted. On the 20th of April I excised the knee. The synovial membrane of the joint was deeply fringed in places, and for the most part it was converted into a pulpy gelatinous mass. Some of the pendulous fringes insinuated themselves between the bones and produced deep pits in the articular surface of the tibia: the under surface of patella was

roughened and the cartilages on head of femur and tibia for most part eroded: the ligaments softened and thickened. Ivory pegs were inserted to keep the bones in position. The case seemed to do well for the first 8 or 9 days. temperature then went up and free supuration occurred The mischief began about the pegs. In spite of free incisions and good drainage the matter worked its way between the muscels of the calf of the leg and into the popliteal space. On the 27th of Aug. 1 amputated the limb about the middle of the After this she made a slow but good recovery. She was discharged well on the 27th of Nov.

CASE No. 11.

M. E. F. aged 17 was admitted to the V. G Hospital on the 17th of June '90 suffering from chronic knee-joint disease of 31 years standing. The history of her case was mislaid, and I cannot give from memory the condition of the knee when it was operated upon. The girl was delicate looking. knee was excised on the 26th of July She made a rapid recovery. was discharged well on the 5th of Nov. 71 days after the operation. letter from her about a year ago from Boston, she was then at service and well. Amount of shortening of limb about 1 in.

Case No. 12.

Maggie F. a healthy young girl aged 18, consulted me in Oct. 1889 for a swollen, painful and tender knee. She gave the following history:—

7 years ago she fell off a tilt and sprained her knee, it did not pain her much at the time but for the following year or two she had occasional attacks of pain and weakness of the joint. In '84 the knee became so painful that she was obliged to consult Dr. Farrell. He treated her on the expectant plan and cauterized the knee. This treatment was continued for 3 mos. with marked improvement. She was now able to walk about fairly well. When she consulted me in Oct. '89 the head of the

femur was enlarged and the knee flexed, the skin on inner aspect of knee had an erysipelatous flush: the head of tibia was misplaced a little backwards and outwards: local temperature increased. I treated her for 8 mos. on the expect-The acute symptoms subsided and most of the tenderness left the joint. In Feb. '90 there was increased lateral motion of joint with marked crepitation. I advised an operation. Her parents consented but she refused. On the 10th of June '90 I met Dr. Parker in consultation who also recommended an excision, patient refused. About the last of June she went to St. Vincent Hospital, N. Y., where she remained for 3 weeks. They treated her there on the expectant plan and recommended an operation. She again refused and came home.

Between Aug., '90, and Aug., '92, she was half the time in bed the other half limping about on sticks. She again consulted me in Nov., '92. Condition of knee now. The knee was flexed about at right angles, motion limited: head of tibia displaced backward and outward: marked lateral motion with crepitation: patella adherent. To straighten the limb weights were put on for 3 weeks.

I excised the knee on the 22nd of Nov., '92. Her temperature went up suddenly to 105 on the evening of the 10th day after the operation. This was caused by over-heating of the She otherwise made a speedy, and uninterrupted recovery. Removed the splint on the 17th of Feb., '93, and put on a plaster of paris one, and allowed her to go about on crutches. The bones were now firmly united by Removed the plaster on the 18th of March and discharged her well, 116 days after the operation. Received the following answer to mine of the 3rd of May :--

Friday, July 7, '93.

DEAR DOCTOR,—Since you operated on my knee last Nov. it has caused me no pain, and since walking on it I do not find it cause me the least inconvenience. I walk on it every day, and yesterday I walked 2 miles, and to-day I do not feel the least fatigued. I never felt so well in health as I do now.

Yours very gratefully,

M. A. F.

REMARKS.

An analysis of the foregoing cases will show that ten of them were tubercular in character, and two the result of traumatism; that ten were successful with an average amount of shortening of from three-quarters to one inch, and two unsuccessful which had to be amputated; no death. cause of failure in one case was due to the irritation caused by the dowels employed to retain the bones accurately in position, and in the other from the bad condition of the knee together with the unfavorable state of the patient. There is no tendency to displacement in any of the cases, and in only one was there any indication of recurrence of the disease, and this slight recurrence took place not in the knee, but in the tibio-fibular joint.

(Since writing the above the head of the fibula had to be removed in case No. 9, and the joint curetted. Patient was discharged "well" from the

V. G. H.) Sept. 2nd.

LIGATURE OF EXTERNAL ILIAC ARTERY.

BY G, H. COBURN, M. D.

Read at Meeting of New Brunswick Medical Society, Fredericton, July 19 and 20, 93.

MR. PRESIDENT AND GENTLEMEN:—
1 have taken from my case book, notes of a successful ligation of the external iliac artery, for hemorrhage from the common femoral, thinking they might prove of interest:—

First:—Because of the somewhat uncommon cause of the bleeding.

Second:—Because the operation is a comparatively rare one.

Third:—Because of the result; ligature of the external iliac, for hemorrhage, not being regarded with much favour, Otis, (Medical and Surgical History of the War of the Rebellion) gives a history of 26 cases, 23, or 88.4 per cent., ending fatally. This of course was before the time of aseptic surgery.

During the absence from the city of the regular medical attendant, was called on the evening of May 17th, 1893, to see A. P., 10 years old, residing about two miles from the city; where I received the following history:—Had been ill nearly two years from morbus coxae, right side, having been treated in the usual way by ex tension, etc. Suppuration had taken place, and a drainage tube introduced. After having been drained some time, the discharge grew less, and the tube was removed. After six months, however, the sinus not having healed and the discharge growing more profuse, it was decided to reintroduce it. Accordingly this was done three weeks ago, the tube being passed through the old sinus. On Monday 15th May, bleeding took place from the tube, about half a pint, the mother thought. On the 16th it bled again, a small quantity. On the 17th it bled freely, and it was deemed best to call a physician. Hemorrhage had stopped before my I found him very pale and anxious looking; pulse 140, weak and irregular; respirations hurried The bandages and dressings shallow. about the groin were saturated with arterial blood, and upon removing them a number of clots were found beneath; probably the hemorrhage had amounted to 8 or 10 oz. I found a rubber drainage tube crossing the thigh, entering at its outer aspect, about 11 inches external to line of femoral, and one inch below poupart's ligament, and emerging at its inner side, just at the base of the scrotum. Thinking the hemorrhage came from the femoral or profunda, and was likely caused by ulceration, from pressure of the tube,

I decided to know the latter, rather than trust to its not bleeding again. Its removal was followed by a free gush of blood from both openings, about 2 oz. being lost before I could effectually compress the femoral. I now sent for assistance and instruments, intending to cut down and tie. After compression for half an hour, however, I found that the bleeding did not recur. His condition being bad, and the prospect of operating by lamplight, not pleasant, I decided to wait until next day, leaving an attendant to make compression, should bleed-

ing take place. May 18th.—The boy having rallied somewhat, ether was given, and I, assisted by Drs. Crocket and Van Wart, proceeded to cut down on the femoral. Several half broken down glands had to be removed, before the The site of artery could be exposed. ulceration was easily found surrounded by blood clots; it was in the common femoral about an inch below poupart's ligament. A probe passed through the sinus which had been occupied by the drainage tube, rested upon the artery just at the site of the ulceration. The tissues around were in a more or less sloughy state. The opening was so high up that it seemed doubtful if a ligature could be placed above, and even if it could be tied, the vessel was in a bad condition. While trying to isolate the artery, the blood clot gave way, and very profuse hemorrhage took place. Compression above was at once made and I rapidly tried to place a ligature in situ; while doing so, however, the weakened vessel gave way entirely. Direct pressure, by the thumb of an assistant in the wound, was now made, which largely, but not entirely, controlled the bleeding. rapidly tied the external iliac, by the extra-peritoneal method, making the usual incision above poupart's ligament, stopping short of the external abdominal ring. The artery was found without difficulty, and a sublimated silk

ligature placed around it, care being taken not to wound the vein. This was tightly tied and the ends cut short, when it was found that the bemorrhage was completely arrested. By this time the condition of the patient was desperate, in spite of several hypodermic injections of brandy which had been resorted to. On this account the operation was hurriedly finished, very few stitches being used to close the wound. He was placed in bed in profound collapse, and very little hope of his recovery felt. However, with the aid of warmth, hypodermic injections of brandy and strychnia, and a rectal injection of a warm saline solution, he soon showed signs of rallying. Pulse 170, very weak and compressible. Complained of some pain and morphia gr. & given hypodermically. This was the only dose of any opiate required at any time. The after history was uneventful, the wound healing by primary union. The temperature rose to 102° F. on the day following the operation, fell to 99° F. the next day, and remained there until the 7th day, when it rose to 101° F., to fall again to 99° F. the following day, where it remained. This rise was caused by the condition of the toes, which on the day following the operation showed signs of gangrene. This for a time caused me great uneasiness, but it did not extend up the foot, and a line of demarcation soon formed. The boy's condition not being very good, I decided not to amputate the toes, but to allow nature to do the work. she has done well, as the following note made in my book July 18th will show :-- " Case has progressed well, general condition improving; good appetize and gaining flesh. The great and three next toes have been amputated through the metatarsophalangeal joints, and the stumps are granulating nicely. The little toe is Scrotal end of drainage tube sinus has closed. A small amount of pus is discharging from the outer end,

and also from a small opening in the line of incision over femoral. A small abscess was found in cicatrix of cut made for ligating the external iliac, and upon opening it I found the igature, which was removed." .This abscess healed in a few days. remains to be said that strict antiseptic precautions were used throughout, and to this fact I attribute, in large degree, the favourable result. It is possible, it would have been better to have used an animal ligature, but I was afraid to trust catgut, and had nothing else at To me, the case was very interesting, showing as it did, the possibility of erosion of the coats of an artery from the pressure of a drainage tube. No doubt the walls of the vessel were weakened by the suppuration going on around it, and it ulcerated through at the point of pressure, which would be increased by the extension of the leg maintained by weight and pulley.

Society Proceedings.

ST. JOHN MEDICAL SOCIETY.

Regular Meeting, Oct. 4, 1893.—The President, Dr. Emery, in the chair-Perforation of appendix vermiformis; general peritonitis; operation; death. Dr. P. R. Inches exhibited the perforated appendix and related the case. Clinical history: a boy of nine years had had abdominal pain and vomiting on the morning of Sept. 27th. He was seen by Dr. Inches on the following morning, when he found marked abdominal pain in the right iliac region, close to the iliac crest, but no tympanitis nor elevation of temperature. He remained in this condition until the end of the third day, when a slight elevation of temperature was noticed, on the morning of the 30th there was marked tympanitis, general abdominal tenderness, temp. 102° F., pulse 110°. Abdominal section was performed in

the afternoon—Operation: an incision four or five inches in length was made in the right semi-lunar line, a faecal odour was noticeable on opening the peritoneal cavity from some pus that came up from the right side, there was considerable lymph around the intestines. The vermiform appendix was found posterior to the caecum, perforated and gangrenous, it was tied and removed. The patient vomited only once after the operation, but died the following day.

The child had eaten grapes the night before his illness began, but no grape stones were found in the appendix, which, however, contained a number of small, much hardened facal masses the size of large shot. During the discussion of the case, it was suggested that the case was one of acute strangulation of the appendix (it was found acutely flexed), the perforation and inflammatory symptoms occurring subsequently.

Dr. G. A. B. Addy read a paper on— "Some points of the routine treatment as practiced in St. John General Public Hospital."

CHRONIC ULCER OF LEG. - After poulticing every two hours until all sloughy material is removed and suppuration ceases, boracic fomentations are used; by taking a piece of lint the size of the ulcer, wetting it in a warm saturated solution of boracic acid. then cover with oiled silk which extends from half to three-quarters of an inch beyond margin of lint to prevent If granulations become evaporation. excessive, one or two applications of sulphate of copper are made. Strapping is occasionally tried. The general condition of patient is kept up by tonics and alteratives. Patient should be kept in bed with leg elevated. the absence of healing under such conditions, antisyphititic remedies are With the above treatment there has never been a failure in curing an ulcer.

EMPYEMA.—During past two years have had four cases with three cures. The treatment practiced with three cases was,-first making a good free incision in fifth or sixth spaces in middle axillary line, some prefer lower down and farther back : after opening has been made to satisfaction of operator, the pleural cavity is thoroughly washed out with (1-60) carbolic or a saturated solution of boracic acid, then two pieces of ruber tubing are inserted attached to a small piece of rubber sheeting to prevent from slipping in,antiseptic dressing is then applied. The irrigation and dressing is kept up daily until discharge ceases when the tubes are removed.

The fourth case had so many other complications that very little could be done for him.

Enysipelas.—Isolation, Perchloride of iron in large doses, and stimulants as required. Some use no local application, others a preparation of Icthyol:

Iethyol, $\bar{5}i$. Lanolin, $\bar{5}s$. Aq, $\bar{5}ii$.

This is applied twice daily. Lead and opium lotion is occasionally used.

TYPHOID FEVER.— Isolation, some fever mixture as spts. aeth. nit. c. liq. ammon. acet. Chlorine water with quinine is occasionally given. Temperature is kept in the vicinity of 102° by cold sponge baths, quinine, antipyrine and phenacetin. Digitalis nux vomica and alcoholic stimulants are given as cardiac tonics.

DIPHTHERIA.—Isolation. Large doses of perchloride of iron with small doses of chlorate of potash and stimulants are given internally; locally papoid and glycerine (gr. xxx—5s.) applied every hour; then spray with a three per cent. solution of peroxide of hydrogen, or Dobell's solution.

It does not follow, that because a man's ideas flow easily and freely, he has water on the brain.

WHAT WE SHOULD NOT DO IN INFAN-TILE HERNIA.—As the processes of evolution in the inguinal hernia of a new-born male infant are often very incomplete, the funicular process is unclosed, the testes is not fully descended, the canal has not attained its obliquity, and as strangulation is exceedingly uncommon in the infant, hence in ordinary, uncomplicated, inquinal hernia with him:

Don'tapply a truss of any kind during the first year, but substitute a bandage, comfortably applied, instead.

Don't permit any sort of waist-band or binder to be worn, but suspend the

clothing from the shoulders.

Don't overlook the facel and urinary

passages, phymosis and constipation.

Don't feed the child on artificial food for the first year, if it can be avoided.

Don't fail to apply an additional supporter on the inner-ring in the event of

whooping cough or measles.

Don't permit any sort of a spring truss to be applied, except in special and rare emergencies, until the infantis able to walk.

Don't be alarmed about the immediate future in these cases when this course is pursued, for by it the infant is spared much pain, the majority of reducible hernize are cured, and in such complicated cases as may require operation they will be much more easily dealt with.

It may be added that in these cases of cystic hernia of the infant, massage and, perhaps, static electricity, might do much towards hastening reabsorption and cure of the hernia. In time as the testes come down the hernia will go up. The greatest part of all grades and phases of cured infantile hernia are relapsable, unless special precautions are observed by the patient.

Femoral hernia is as rare in boys as umbilical is common. The latter is almost invariably spontaneously curable.

THOMAS H. MANLEY, M. D. 302 W. 53d St., New York City.

BRONCHIAL ASTHMA.—R Jodide of Ammonium 2 drachms; Fl. Ext. Grindelia Robusta ½ ounce; Fl. Ext. Glycyrrhiza 4 drachms; Tinct. Lobelia 2 drachms; Tinct. Belladonna 2 drachms; Syr. Tolu q. s. to make 4 ounces.

M. Sig. Teaspoonful three times a day; extra dose during a paroxysm.

Maritime Medical Dews.

NOVEMBER, 1893.

EDITORS.

Communications on matters of general and local professional interest will be gladly received from our friends everywhere.

Manuscript for publication should be legibly written in ink on one side only of white paper.

All manuscript, and literary and business correspondence to be addressed to

DR. G. M. CAMPBELL,
9 Prince Street, Halifax.

The formal opening of the Halifax Medical College took place on Thursday afternoon Oct. 5th. The majority of the teaching staff were present. Among the visitors we noted the Hon. W. S. Fielding, Prof. Currie, and Surg. Capt. Barefoot.

There has been no formal opening for some years, perhaps for the very good reason that the profession are more for work than for display. The idea however is a good one, and should be carried out in the future. The President warmly welcomed the students who were present to the city and college. He spoke of the good work the college had done in the past, the high standing taken by its students the work it was prepared to do in the future. The college stood ready not only to benefit by the experience

of other schools, but was willing to innitiate changes for the benefit of its students. The special advantages of a small school were dwelt upon. The excellent reputation of the school abroad enabled its students to take their final year, if so wished, in larger schools, with every possible advantage to our students.

He then called upon the Dean, who delivered the inaugural address: presumed that the students present had entered upon the study of medicine with the highest motives and after long prayerful consideration. medical profession demanded qualities of body and mind. It was a poor trade but a noble calling. rewards, beyond the deep gratitude of one's fellows, were not conspicuous. The first medical peer has yet to be created. No one has become a millionaire by the practice of medicine, so far. The life of the medical man is full of hard work, self denial, and the daily exhibition of heroism in the fighting of contagious diseases. What would be considered marvellous heroism for a clergyman, is the physicians daily duty. He emphasized the necessity of a high standard of ethics. He spoke at length of the various changes introduced with this session. He regretted the retirement of Dr. Lindsay from the secretaryship. The President then called upon the Hon. W. S. Fielding, who addressed the convocation in his usual happy and pointed manner. From the multiplicity of Colleges his government could not assist higher education in the way they would like but that in the case of the Halifax Medical College there was

TO THE MEDICAL PROFESSION OF CANADA.

In submitting to you my Canadian combination, Fellows' Compound Syrup of Hypsoposphites, permit me to state four facts:

1st. The statements contributed are founded upon experience, and I believe them true.
2nd. This compound differs from all hitherto produced, in composition, mode of

preparation, and in general effects, and is offered in its original form.

3rd. The demand for Hyphoposphite and other Phosphorus preparations at the present day is largely owing to the good effects and success following the introduction of this article.

4th. My determination to sustain, by every possible means, its high reputation as a

standard pharmaceutical preparation of sterling worth.

JAMES I. FELLOWS, Chemist.

SYR. HYPOPHOS. CO., FELLOWS

CONTAINS

The Essential Elements of the Animal Organization-Potash and Lime;

The Oxidizing Elements-Iron and Manganese;

The Tonics-Quinine and Strychnine;

- And the Vitalising Constituent—Phosphorus; the whole combined in the form of a Syrup, with a slight alkaline reaction.
- It differs in its Effects from all Analogous Preparations: and it possesses the important properties of being pleasant to the taste, easily borne by the stomach, and harmless under prolonged use.
- It has gained a Wide Reputation, particularly in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs. It has also been employed with much success in various nervous and debilitating diseases.
- Its Curative Power is largely attributable to the stimulant, tonic, and nutritive properties, by means of which the energy of the system is recruited.
- Its Action is Prompt: it stimulates the appetite and the digestion, it promotes assimilation, and it enters directly into the circulation with the food products.

The prescribed dose produces a feeling of buoyancy, and removes depression and melancholy; hence the preparation is of great value in the treatment of mental and nervous affections. From the fact, also, that it exerts a double tonic influence and induces a healthy flow of the secretions, its use is indicated in a wide range of diseases.

NOTICE-CAUTION.

The success of Fellows Syrup of Hypophosphites has tempted certain persons to offer imitations of it for sale. Mr. Fellows, who has examined samples of several of these, FINDS THAT NO TWO OF THEM ARE IDENTICAL, and that all of them differ from the original in composition, in freedom from acid reaction, in susceptibility to the effects of oxygen, when exposed to light or heat, in the property of retaining the strychnine in solution, and in the medicinal effects.

As these cheap and inefficient substitutes are frequently dispensed instead of the genuine preparation, physicians are earnestly requested, when prescribing to write "Syr. Hypophos. FELLOWS."

As a further precaution, it is advisable that the Syrup should be ordered in the original bottles: the distinguishing marks which the bottles (and the wrappers surrounding them) bear can then be examined, and the genuineness—or otherwise—of the contents thereby proved.

Wyeth's Compressed Triturated Drugs.

Safer, Pleasanter, and more Efficient and Convenient Medication for Infants, the Fastidious, and Idiosyncratic.

An Innovation.

Brunton points out that the introduction of the method of giving small doses at frequent intervals has "the very great advantage that the desired effect can be produced with greater certainty and with less risk of an overdose being taken."

What are Compressed Triturates?

The Compressed Triturates are "intimate mixtures of substances with sugar of milk." In no way are they allied to the sugar of milk of globules or pellets, dependent so largely upon chance for the absorption of the medicaments poured down the side of the bottle. The following directions are those given in the Pharmacopæa, U. S., for the preparation of Triturates: "Take of the substance ten parts, sugar of milk in moderately fine powder ninety parts, to make one hundred parts; weigh the substance and the sugar of milk separately; then place the substance previously reduced if necessary to a moderately fine powder, into a mortar, add about an equal bulk of sugar of milk, mix well by means of a spatula and triturate them thoroughly together. Add fresh portions of the sugar of milk from time to time, until the whole is added, and continue the trituration until the substance is intimately mixed with the sugar of milk and finely comminuted.

Resume of Advantages.

1. The Compressed Triturates are made with the pure drug and sugar of milk.

2. The process of trituration, employed so finely, subdivides and separates the mass of medicament, that this is said to be more active than would the same quantity given in the ordinary way.

3. They contain each a very small dose, so that by giving one at a time—they may be

repeated often-the taste of the drug is hardly, if at all, perceived.

4. Being made with sugar of milk, one of them (if not taken whole) added to a little milk

or other fluid is at once "broken up" and distributed throughout the liquid.
5. Pulverulent substances, like calomel, are by this means especially distributed well, and for the moment suspended throughout the fluid.

6. Being very small, and not globular, they are easy to swallow.

7. They do not harden and become insoluble with time, nor do they crumble like pills.

8. They afford the advantages derivable from the administration of small doses repeated often, which are: 1. That if the drug be given in but little liquid, the absorbent power of the mucous membrane of the mouth and gullet are called repeatedly into requisition. 2. That if given on an empty stomach (as is generally desirable) unpleasant symptoms are avoided. 3. In case of idio-ynerasy, the doses can be stopped before large amounts have been given. Administered in this way drugs are better tolerated than is otherwise the case.

9. A greater effect is alleged to be attainable by this method from a small quantity of

medicine than is possible by the usual plan.

10. In some cases Compressed Triturates are repeated as often as every five or ten minutes, and it is surprising how soon a very small dose of medicine repeated often amounts to a very large quantity.

11. If taken whole, one of the Compressed Triturates dissolves and falls to pieces in the

stomach at once, and is never voided unchanged.

- 12. They afford accuracy of dose, without the trouble and annoyance of weighing or measuring.
- 13. They can be taken at any time and in any place, even when the patient is following his ordinary avocation.

14. They are only a few lines in thickness and about one-fourth the circumference of a lead pencil.

Samples of Triturates free to medical men.

In all orders specify WYETH's and avoid disappointment.

DAVIS & LAWRENCE. MONTREAL, Sole Agents for Canada.

no difficulty. Here all could join with unanimity and with the feeling that the people's money was well expended. It was a matter of regret to him that the citizens of Halifax did not take a greater interest in their institutions for higher education, especially the Medical College.

The Halifax Branch of the British Medical Association held a successful meeting at the Queen Hotel, on Thursday, Oct. 12th. It was followed by a hot supper, which was very much appreciated by those who were fortunate enough to be present. These meetings promise to be of great value, and should be attended whenever possible. Strangers in the city are heartily welcome at any and all of the meetings.

Hersonal.

DR G. A. B. ADDY has resigned the position of Resident Physician and superintendent of the St. John General Public Hospital, resignation to take effect December 1st. when his two years of service will have expired.

ONE of the Commissioners of the St. John Hospital has been getting into trouble by taking too many and too large samples of provisions home for the purpose of seeing that they reached the proper standard. He has been asked to resign but has not yet done so!

ONE of the St. John Daily papers recommends that paying patients in the Hospital of that city should have the privilege of being attended by the physician or surgeon of their choice whether he is on the staff or not Why not?

DR. GEORGE DEWITT of Wolfville, was in town on October 12th, and attended the meeting of the Branch of the British Medical Association.

WE extend congratulations to Dr. Rand of Parrsboro who was recently married.

DR. BYERS of Spring Hill, was in town on October 12th.

In Vol. 2, No. 12, of Opthalmic Record, an article on disease of the mastoid by Dr. Stephen Dodge of Halifax. The case reported in this paper is unusual interesting from the fact that the recovery of the hearing of the patient was remarkable, and to this feature we call special attention, since in the issue above mentioned, page 481, line 17, we have made it appear that the patient could hear a whisper at 15 inches, when it should have been 15 feet. Later she heard a whisper at 20 feet instead of 20 inches.

CANADIAN MEDICAL ASSOCIATION.

Officers for 1893-4

President.—T. T. S. Harrison, Selkirk Ont.

Vice-Presidents.—For Ontario, J. R. Eccles, London; Quebec, J. Stewart, Montreal; New Brunswick, J. Christie St. John; Nova Scotia, W. S. Muir, Truro; Manitoba, R. Spencer, Brandon; North West Territories, F. H. Newburn, Lethbridge; Prince Ed. Island, F. B. Taylor, Charlottetown; British Columbia, R. E. McKechnie, Nanimo.

General Secretary.-F. N. G. Starr, Toronto.

Local Secretaries.—For Ontario, I. Olmsted, Hamilton; Quebec, J. V. Couglin, Montreal; New Brunswick, M. MacLaren, St. John; Nova Scotia, R. A. H. McKeen, Cow Bay; Manitoba, A. McDiarmid, Winnipeg; N. W. T., Calder, Medicine Hat; P. E. I., Johnston, Charlottetown; B. C., Walker, New Westminster.

Treasurer.—H. B. Small, Ottawa.

The place of meeting in 1894 is Saint John N. B.

Correspondence.

MY DEAR DR. CAMPBELL:

In response to your request I append a few notes expressive of the opinions formed during a recent visit to Montreal.

Although it is little more than two years since I was in Montreal before, many changes attracted my attention. Always a beautiful city, the Hochelaga of early days is not behind the modern notions of improvement, and in addition to the erection of a very large number of elegant residences and business houses, the last few years has seen an extensive adoption of street paving, the introduction of electric trams, and other evidences of progress and prosperity. The hygienist delights in the better streets of Montreal -so easily kept clean, so free from dust and from the noise and rattle of Surely this must tend to the improvement of the public health.

But what will be of most interest to you and your readers is an account of the advances made and being made in the medical circle of our Canadian And the improvements metropolis. in medical charities have been great The old Montreal General Hospital—dear to the heart of many physicians in these Maritime Provinces - had grown cramped and dingy enough before the writer received the parchment which freed him from the compulsion of further clinical study But now two handsome new wings, fitted according to the best of present day ideas, increase the capacity of the hospital by over a hundred beds. And plans have already been prepared for a complete alteration of the internal arrangements of the original building, so that very shortly the whole hospital will be in every respect quite abreast of our knowledge. new wings are entirely devoted to. surgery, and are admirably arranged for the work. Bright, airy, cheerful,

they are the quintessence of cleanly neatness-esthetic and aseptic. operating theatre in connection with these new wards is unquestionably a thing of beauty and a joy for-well, several years, at all events. In this theatre I had the good fortune to see Dr. James Bell do the removal of the casserian ganglion by the method (if I mistake not) advocated by Rose. The patient was a woman who had passed by more than a half century of life, and who for many years had been a martyr to trigeminal neuralgia which was relieved by nothing short of opium to narcosis. Stretching of the branches of the nerve at their superficial foramina had not been followed by any permanent relief, and now she was willing to submit herself to any risk for a chance for exemption from pain. The patient was prepared in the way usually adopted for such operations, according to the aseptic method, and chloroform was used as the anesthetic. Dr. Bell incised the tissues directly to the bone, carrying the knife from just behind the outer angle of the eye well up over the temple, then, curving backwards and downwards, terminated a large horse-shoe shaped incision immediately in front of the tragus. By means of chisel and mallet, the skull was divided to correspond with this incision, and the bone and superficia tissues were turned out together. This laid bare a large surface of brain, and gave ample room for the further steps of the operation. Carefully working his way inward by separating the dura mater from the base of the skull and holding up the brain with a broad retractor, Dr. Bell was soon able to identify the foramen ovale, and then readily traced back to where the ganglion lay in its depression near the apex of the petrous portion of the temporal It required careful dissection to free the ganglion from the dura, and a very considerable oozing of blood, of course, obstructed the view into the field of operation, but the

doctor was not long in accomplishing his aim and soon held the diseased ganglion in the point of his forceps, free from its attachments. Several days after the operation I learned that the patient was doing very well and suffering little discomfort.

In the medical wards of this hospital there are at present a large number of cases of typhoid fever. Dr. Wilkins has for some years been constantly using Brand's method of treating these cases, by the cold bath, and his enthusiasm and faith in the efficacy of this treatment has not lessened one whit. The records of the hospital prove his confidence to be well placed. The routine of the treatment is so well known, and Dr. Wilkin's articles on it so generally read, that I need not take up any of your time in its description.

The new Royal Victoria Hospital, which has been in process of erection for so long a time, is now all but completed. Dr. James Stewart, who is to be the attending physican, very courteously took me through the buildings. I wish that it lay in my power to describe to you, in a reasonable space, this magnificent structure. Situated almost at the foot of Mount Royal, it is sufficiently elevated to command a magnificent view of the city, and it would seem that, placed where it is, it would be impossible not to secure good drainage. The administrative block separates the medical from the surgical wing, and is itself quite disconnected from the wards save by covered bridges. In this block are the offices, quarters for the house staff (including the nurses), private rooms for the attending medical men. and, at the very top of the building, the kitchen. Everything about the building has an air of staunchness about it which impresses one forcibly. It is easily seen that no expense has been spared in the construction of this great gift of Sir Donald A. Smith and Lord Mount Stephen to the people of Canada.

As stated before, the medical and surgical wings are quite distinct from one another, and each has its own arrangements for clinical teaching. A separate entrance is allotted to students in each of the wings, and elaborate cloak-rooms have been provided. medical theatre is large, excellently lighted, and furnished most comfort-The surgical theatre was not completed at my visit. In each of the wings and also in the administrative block are elevators of size sufficient to easily accommodate a bed. These will be used in transferring patients from floor to floor, or from the wards to the theatres. The wards are large and airy, extremely well lighted, and ventilated according to the most approved The windows reach from the floor nearly to the ceiling, and are double-the outer sash being separated from the inner by a considerable space. A transom at the top the inner and at the bottom of the outer sash allows a constant current of air to flow into the wards without producing draughts. The closets and bath-rooms are situated in semi-detached towers, which not only provide for excellent sanitary arrangements, but add very much to the architectural appearance of the hospital. No sharp corners are to be found in the walls, so that dust may not accumulate. The beds are all of the Lawson Tait pattern, are of a plain design, so that they may be readily cleaned, and are enamelled in All tables, including those at the bedsides, are of enamelled iron frame with plate glass tops. graduated nurses will be employed.

This note is very disconnected and gives far from a complete account of what it attempts to describe. But a feeling of consideration for your space and for the patience of your readers has forbad me being more explicit.

Yours very sincerely, W. H. HATTIE.

Hospital for the Insane, Oct., 1893.

Selections.

A NEW CANCER CURE.—The following is a specimen of the kind of rubbish which is published by the lay press, and from which the public derive much of their curious medical beliefs: "A new way of combating cancer is the discovery of a German physician named Felheisen. Perceiving an affinity between cancer and erysipelas he injected the virus of the latter into dogs which had been previously inoculated with cancer, with the result of the disappearance of the latter. It is on the principle pursued by Dr. Felheisen in his canine experiments that the physicians in the great cancer hospitals, both of this country and Europe, are now proceeding to rob cancer entirely of its sting. When the disease makes its appearance they inject a brood of ervsipelas 'cultures,' which they have raised artificially in a medium of gelatine or beef-tea, into the blood of the patient. The erysipelas cultures fight the cancer microbes in the blood, and do not cease until they have exterminated them. The cultures then are expelled from, or of themselves leave the system when they have done the work, and the patient is cured." We may before long have cancer institutes where people are cured by wholesale with hypodermic injections.-Boston Med. and Surg. Journal.

DANDRUFF AND BALDNESS.

Many people are constantly annoyed by the accumulation of dandruff. A thorough cleansing of the scalp with soap and water removes it, but within twenty-four hours another crop is well under way. One remedy after another is made use of, until the patient becomes discouraged, and believes that this troublesome condition must remain unaltered. With this state of affairs the hair becomes dry, dull and brittle. Its old time gloss has given way, and slowly the hair falls out, and soon the patient becomes prematurely bald. In these cases we can usually find some derangement of the general nervous system. The nerves governing the capillaries or rather arterioles, in and about the hair bulbs have by their influence reduced the amount of blood sent to nourish and rebuild these narts. Or, in other words, wherever we find this accumulation of dandruff, we notice a lack of stimulation in the part; consequently remedies which combine stimulating and antiseptic properties, cleanse the parts and invite an increased flow of blood, permanently curing the trouble. As to the various medicinal agents advantageously used, the practitioner may choose from many. The following formula combines valuable properties:

R.	Tr. capsicum 5 j
,	Tr. cantharis 5 ss
	Fld. ext. pilocarpus 5 ss
	Antisep. tablets (Seiler's) No. ij
	Glycerine 5 j
*	Water

M. Sig.—Apply as an ordinary hair dressing two or three times a week, or more frequently if the case demands.—Ex.

EXPERIMENTS WITH RATTLESNAKES. In the pathological laboratory of Johns Hopkins Hospital it was necessary recently to determine the exact action of the poison of the rattlesnake. creatures were kept in a wire-covered box. When one was required for experimental purposes, it was caught round the neck by a noose at the end of a stick. A deep glass vessel was then presented to the enraged animal, and it instantly struck its edge with The poison, which was its fangs. caught in the bottom of the vessel, was freefrom all foreign admixture. Minute quantities injected beneath the skin of rabbits produced marked lesions. For some reason or other the snakes re-fused food, and in order to keep them alive an egg mixture had to be forced down their throat by means of a stout glass tube. -Ex.

Treatment of Cholera.

Dr. Chas. Gatchell, of Chicago, in his "Treatment of Cholera," says: "As it is known that the cholera microbe does not flourish in acid solutions, it would be well to slightly acidulate the drinking water. This may be done by adding to each glass of water half a teaspoonful of Horsford's Acid Phosphate. This will not only render the water of an acid reaction, but also render boiled water more agreeable to the taste. It may be sweetened if The Acid Phosphate, taken as recommended, will also tend to invigorate the system and correct debility, thus giving increased power of resistance to disease. It is the acid of the system, a product of the gastric functions, and hence, will not create that disturbance liable to follow the use of mineral acids.

Send for descriptive circular. Physicians who wish to test it will be furnished, upon application, with a sample, by mail, or a full size bottle without expense, except express charges. Prepared under the direction of Prof E. N. Horsford, by the

RUMFORD CHEMICAL WORKS, Providence, R. I. Beware of Substitutes and Imitations.

New York Post-Graduate Medical School and Hospital. TWELFTH YEAR-SESSIONS OF 1893-94.

The Post Graduate Medical School and Hospital is continuing its existence under more favorable conditions than ever before. Its classes have been larger than in any institution of its kind, and the Faculty has been enlarged in various directions. Instructors have been added in different departments, so that the size of the classes does not interfere with the personal examination of cases. The institution is in fact a system of organized private instruction, a system which is now thoroughly appreciated by the profession of this country, as is shown by the fact that all the States, Territories, the neighbouring Dominion and the West India Islands are represented in the list of matriculates.

In calling the attention of the profession to the institution, the Faculty has to can that these

Islands are represented in the list of matriculates.

In calling the attention of the profession to the institution, the Faculty beg to say that there are more major operations performed in the Hospital connected with the school than in any other institution of the kind in this country. Not a day passes but that an important operation in surgery and gynecology and ophthalmology is witnessed by the members of the class. In addition to the clinics at the school published on the schedule, matriculates in surgery and gynecology, can witness two or three operations every day in these branches in our own Hospital. An out-door midwifery department has been established, which will afford ample opportunity to those desirror special instruction in heddide observies. ing special instruction in bedside obstetries.

Every important Hospital and Dispensary in the city is open to the matriculates, through the structors and Professors of our schools who are attached to these Institutions.

FACULTY.

FACULTY.

Diseases of the Eye and Ear.—D. B. St. John Rooss, M. D., Ll.D.: President of the Faculty: W. Oliver Moore, M. D., Peter A. Callan, M. D., J. B. Emerson, M. D.

Diseases of the Nose and Threat.—Clarence C. Rice, M. D., O. B. Douglas, M. D., Charles H. Knight, M. D.

Venereal and Genito-Urinary Disease.—L. Bolton Bangs, M. D.

Diseases of the Skin and Suphilis.—L. Duncan Bulkley, M. D., George T. Elliot, M. D.

Diseases of the Mind and Nervous System.—Professor Charles L. Dana, M. D., Græme M. Hammond, M. D.

Pathology, Physical Diagnosis, Clinical Medicine, Therapeutics, and Medical Chemistry.—Andrew H. Smith, M. D., Wm. H. Porter, M. D., Stephen S. Burt, M. D., George B. Fowler, M. D., Farquhar Ferguson, M. D., Reynolds W. Wilcox, M. D., LlD.

Surgery.—Lewis S. Pilcher, M. D., Seneca D. Powell, M. D., A. W. Phelps, M. D., Robert Abbe M. D., Charles B. Kelsey, M. D., J. E. Kelly, F. R. C. S., Daniel Lewis, M. D., Willy Meyer, M. D.

Diseases of Women.—Professors Bache McEvers Emmet, M. D., Horace T. Hanks, M. D., J. R. Nilsen, M. D., H. J. Boldt, M. D., A. Palmer Dudley, M. D., George M. Edebohls, M. D.

Diseases of Children.—Henry D. Chapin, M. D., Augustus Caillè, M. D.

Pharmacology.—Frederick Bagoe, Ph. B.

Electro-Therapeutics and Diseases of the Mind and Nervous System.—Wm. J. Morton, M. D.

For further information please call at the school, or address Clarence, Rice, M. D., Sect'y

F. E. FARRELL, Superintendent.

226 East 20th Street, New York City. F. E. FARRELL, Superintendent.

WHEELER'S TISSUE PHOSPHATES.

WHEELER'S COMPOUND ELIXIR OF PHOSPHATES AND CALISAYA. A Nerve Food and Nutritive Tonic for the treatment of Consumption, Bronchitis, Scrofula, and all forms of Nervous Debility. This

tive Tonic for the treatment of Cousumption, Bronchitis, Scrofulu, and all forms of Nervous Debility. This clegant preparation combines in an agreeable Aromatic Cordial, acceptable to the most irrituals conditions of the stomach: Cone-Calcium, Phosphate Ca₂ 2PO₄ Sodium Phosphate Na₂ 11PO₄, Ferrous Phosphate Fe₂ 2PO₄, Trihydrogen Phosphate I PO₄ and the active Principals of Calisaya and Wild Cherry. The special indication of this combination is Phosphate 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 restoratice in Sexual Debility, and all used-up conditions of the Nervous system should receive the careful attention of therapeutists NOTABLE PROPERTIES.—As relnable in Dyspepsia as Quinine in Ague. Secure: 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 good-will of the patient. Being a Tissue Constructive, it is the best general utility compound for Tonic Restorative purposes we have, no mischievans effects resulting from exhibiting utility compound for Tonic Restorativ-purposes we have, no mischievous effects resulting from exhibiting it in any possible morbid condition of the system.

Phosphates being a NATURAL FOOD PRODUCT no substitute can do their work.

Dose .- For an adult, one table spoonful three times a day, after eating; from 7 to 12 years of age, one dessert-spoonful; from 2 to 7, one tensuoonful. 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 bottles only, and sold by all Druggists at One Dollar.

BELLEVUE HOSPITAL MEDICAL COLLEGE, CITY OF NEW YORK, Sessions of 1893-94.

The REGULAR SESSION begins on Monday, September 25, 1893, and continues for twenty-six weeks. During this session, in addition to the regular didactic lectures, two or three hours are daily allotted to clinical instruction. Attendance upon three regular courses of lectures is required for graduation. The examinations of other accredited Medical Colleges in the elementary branches, are accepted by this College.

The SPRING SESSION consists of daily recitations, clinical lectures and exercises and didactic lectures on special subjects. This session begins March 26, 1894, and continues until

he middle of June.

The Carnegie Laboratory is open during the collegiate year, for instruction in microscopical examinations of urine, practical demonstrations in medical and surgical pathology,

and lessons in normal histology and in pathology, including bacteriology.

For the annual Circular, giving requirements for graduation and other information, address Prof. Austin Faint, Secretary, Bellevue Hospital Medical College, foot of East 26th

Street, New York City.

H W CAMERON,

Pharmaceutical Chemist and

219 BRUNSWICK STREET, HALIFAX, N. S.

CHEMICALS. RUBBER PURE DRUGS. GOODS, TRUSSES, ATO-MIZERS, CLINICAL THERMOMETERS, HYPODERMIC SYRINGES, BANDAGES. ANTISEPTIC GAUZES. Etc.

Physicians Supplies a Specialty.

Orders by mail promptly attended to.

BELL AT TELEPHONE 339. NICHT

PURE AND RELIABLE

LAMAH. ANIMAL VACCINE FRESH DAILY.

LIBERAL DISCOUNT TO DRUGGISTS. SEND FOR CIRCULAR.

10 Ivory Points, double charged	00
10 Ivory Points, double charged	00

Orders by Mail or Telegraph promptly Dispatched.

NEW ENGLAND VACCINE CO., CHELSEA STATION, BOSTON, MASS.

WM. C. CUTLER, M. D.

J. F. FRISBER, M. D.

STEARNS'

CASCARA ARCMATIC

Is a fluid extract (not a cordial syrup or other divide preparation) of prime and selected two year old bark (Fresh bark contains a ferment)

Cascara Aromatic is sweet in tastef which children and women especially appreciate. instead of being bitter, as is the ordinary fluid extract. powerful (Its dose is only 1) yet gentle effect, and in addition. does not gripe (This, next to its taste, is its most valuable property, as ordinary bitter)

Surely an Ideal Laxative.

Samples and Literature Free.

FREDERICK STEARNS & CO. Manufacturing Pharmacists. -

DETROIT, Mich.

MARTTIME

EDICAL NEWS

ESTABLISHED 1888.

SUBSCRIPTION PRICE. ONE PER ANNUM. DOLLAR

All Medical Men in the Maritime Provinces may well take interest in this only local journal.

Subscribers, interest your professional neighbours in the NEWS.

WHO ARE WE?

We are a firm of Booksellers, Stationers, Newsdealers, &c., &c., who have been in business over a quarter of a century. We carry the largest stock. We have direct communication with every city in Canada, Europe, and the United States. Know where and how to get any book or periodical published, in the quickest and cheapest way. We make a specialty of procuring

MEDICAL BOOKS.

We solicit orders from you, and will look carefully after your interests if you do so. We will give you lists, prices or other information about books, no matter how old or how new, simply for the asking.

WHERE ARE WE?

Well most Nova Scotians know that the British American Bookstore is right in the heart of the Business World of Halifax, at 124 & 126 Granville St. Our wholesale and goods entrance is by the north door, the entrance to our retail and manufacturing department is by the south door. We take in orders or money at either door.

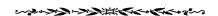
T. G. ALLEN & COMPANY.

e@ ESTABLISHED 1830. ခြဲခု

JAMES BOWES & SONS.

KEROOK EN HOEKERSKY

142 HOLLIS STREET, HALIFAX.



Professional Cards, Bill Heads, Pamphlets and all descriptions of Ioh Work

PRINTED PROMPTLY TO ORDER

CANADIAN

MEDICAL PRACTICE & PARTNERSHIP OFFICE.

Opened for the convenience and protection of the Profession for: The purchase and sale of Practices; The purchase and sale of Suitable Properties; The arrangement of Partnerships; Securing eligible Openings; Assistants,

Locum toners, and Office Students.

J. E. WHITE, M. B., Tor. Univ.; M. C. P. & S., Ontario; 185 Carlton Street, Toronto.

ALL TRANSACTIONS AND COMMUNICATIONS STRICTLY CONFIDENTIAL.

WANTED.—Practice of \$4000 or over in St. Stephens, Moncton, Sussex, or any prosperous centre, by gentlemen of experience, and European qualifications. Can pay \$1000, cash on property, with good introduction or would buy a partnership.

Partnership desired by graduate of exceptional standing and Hospital experience, with Senior holding active practice, and requiring leisure, in town or country. Highest professional references.

FOR SALE.—Fine village and country practice in New Brunswick, about \$2,500 and good pay, good field; one conferre, succession with some equipment \$500, principal taking city practice, capital opening.

FOR SALE.—New Brunswick, first class, well established country practice, \$2,000, a year, competition slight; good pay; all well-to-do-farmers, richest country in Province, Residence and good introduction \$3,500, cash and negotiable paper. Reason for selling, sickness.

A good practice for transfer in thriving manufacturing town in Nova Scotia, pop. over 2,000, fine field, very easy terms if transferred before end of October.

Enquiries have been directed to this Office for Practices in Nova Scotia, N. B., P. E. Isl. or English speaking portions of Quebec.

Gentlemen in any of these Provinces, desiring to dispose of their properties and practices or secure partners, would confer a favor on their confieres, by entering the particulars and lowest terms, upon the Confidential Register of the M. P. P. office, and avail themselves of its private methods and advantages, in the transfer.

The strictest privacy, is exercised, that neither name nor location, is known, until all the details have been considered satisfactory, and purchaser agrees to meet the cash required, if on visiting the one selected, he finds, it is as has been represented, as to cash income, value of property and suitability of field.

The honor of each one is pledged in all negotiations and has never been violated in the experience of the office.

Register Blanks for details of with terms, sent on application to vendor or purchaser. These will supply all complete and concise particulars, necessary for a choice without name or address.

All necessary advice, the experience of the office possesses, is freely at the service of those wishing its aid. No Commission is expected until transfer has been made, and all negotiations are made through it as a reliable medium, by both vendor and purchaser and each party pays an equal share of the Office Commissions.

Gentlemen in quest of suitable locations, requiring private details of any particular place, without incurring the expense of travelling, may procure perfectly reliable particulars through the Office immediately following the registration of the wants.

Inquiries, not inclosing stamp for reply, are unnoticed.

HALIFAX

MEDICA DLLEGE.

THE TWENTY-SIXTH SESSION of the Halifax Medical College will be opened Wednesday, October 4th, 1893.

The regular order of lectures will begin on that day and will be continued during the six

months fellowing.

The College building erected for the special purpose of medical teaching is in every way fitted for the object in view. It is situated in an open, airy locality, in close proximity to the Victoria General Hosnital and the new City Alms House. The lecture room, dissecting room, etc., are well lighted, warmed and ventilated, and are fitted with appliances for importing

knowledge in the different subjects of medical education.

Students have access also to the Halifax Dispensary where they have an opportunity of seeing daily cases of such diseases as are usually treated in the different departments of such

an institution.

Certificate of attendance on the various courses are accepted as qualifying candidates for examination before the licensing bodies of Great Britain and Ireland, and the Medical Schools and Universities in Canada and the United States.

The Course in Pharmacy has been re-established and regular lectures will henceforth be

given in the different subjects of the curriculum.

For Annual Calendar and all information, address.

DR. CARLETON JONES.

Secretary of the Faculty.

WHO BINDS? KNOWLES',

COR. GEORGE & GRANILLE STS. HALIFAX.

Write for Prices, &c., for Lancet, Journals, Charts, MEDICAL NEWS, &c., &c., &c.

The Maritime Medical News.

-REACHES THE-

PRACTITIONERS

-OF THE-

MARITIME PROVINCES.

ADVERTISING.

IF you wish to advertise anything anywhere at any time, write to GEO. P. ROWELL & CO., No. 10 Spruce Street, New York.

EVERY one in need of information on the subject advertising will 'do well to obtain a copy of "Book for Advertises." 368 pages, price \$1.03. Mailed, postage paid, on receipt of price. Contains a careful compilation from the American Newspaper Directory of all the best papers and class journals; gives the circulation rating of every one, and a good deal of information about rates and other matters pertaining to the business of a wertising.
Address ROWEGE'S ADVERTISING BUREAU.

10 Spruce Street, New York.



free Handbook oureau for securing patents in America, atents taken out by us is brought before did by a notice given free of charge in the

Largest circulation of any scientific paper in the world. Splendidly illustrated. No intelligent man should be without it. Weekly, \$3.00 a year; \$1.50 six months. Address MUNN & COMPUBLISHERS, 361 Broadway, New York City,

MALTO PEPTONIZED PORTER,

FOR INVALIDS, CONSUMPTIVES, AND DYSPEPTICS.

THIS combination, containing the finest quality of *PORTER* imported from the Messrs. A. I Guinness, Son & Co., Limited, of Dublin, together with *PEPSIN* (the digestive power of 10,000 grains of albumen to the bottle), *EXTRACT OF MALT* and *DANDELION*, appeals to the understanding of the Profession as being well adapted to a numerous class of cases.

In 1400 bottles given to medical men, as samples, positive GOOD RESULTS can be given from over 200 answers received from those by whom Multo Peptonized Porter has been thoroughly tested and used. There has NOT BEEN ONE SINGLE FAILURE reported, but all pronounce that it is the most perfect concentrated liquid food, tonic, and antidyspeptic preparation ever put before them.

In no single instance has it been rejected by the most delicate stomuch.

Where the stomach has been so irritable that no food could be retained, Malto Peptonized Porter has acted like a charm, and there has been no difficulty thereafter in the stomach retaining food.

In the many cases in which Malto Peptonized Porter may be indicated are the following

- (a) Convalescence from acute diseases—such as typhoid fever.
- (b) Atonic Dyspepsia.
- (c) In persons of consumptive tendencies. Here it has been found to be a most perfect substitute for Cod Liver Oil—the malt giving the fats producing elements necessary to the supply of the wasted tissues, with the other ingredients furnishing the tonic and stimulating effect-required.
- (d) In the treatment of cases of Alcoholism. In all cases in which it has been used it has answered admirably in allaying the irritation, vomiting, and consequent desire of stimulants of an unhealthy nature.
- (e) In wasting diseases of children.
- (f) For administration to nursing mothers.
- (g) Where there is sleeplessness from flatulence, over-taxed brain and nervous system.

SAMPLES CAN BE OBTAINED FREE BY THE PROFESSION

-ON APPLICATION TO-

The Malto Peptonized Porter Company,

(LIMITED.)

TRURO, NOVA SCOTIA.

Please mention "The Maritime Medical News."

Eligible Medicinal

SPECIALTIES.

Among remedies which are always in demand are alteratives, laxatives, and tonics.

We have a most eligible and therapeutically satisfactory line of these, as our facilities for securing the highest quality of drugs are unequalled. We guarantee every unopened package from our laboratory absolutely as represented.

Among these classes of preparations we may commend especially as tonics, Coca Cordial, Pepsin Cordial, Esencia de Calisaya, Weld's Syrup of Chloride of Iron.

Of the alteratives, Syrup Trifolium Compound, Syrup of Hydriodic Acid. [2 per cent.]

Among laxatives we have many formulæ. As a general laxative Cascara Sagrada stands easily first. Many of the laxative formulæ meet special indications.

History, literature, and all experience indicate that Medication has to play its part, and that Nature cannot alone restore lost function. The duty of the modern doctor to the patient is, in prescribing, to specify drugs the purity of which he can youch for.

The pharmacist of to-day appreciates the necessity of keeping in stock salable specialties, unprotected by patent or proprietory interest in them, to meet the requirements for pure palatable products.

We invite correspondence from the profession concerning our products, and will afford all information regarding them desired.

PARKE, DAVIS & CO.

Detroit, New York, Kansas City, and Walkerville, Ont.